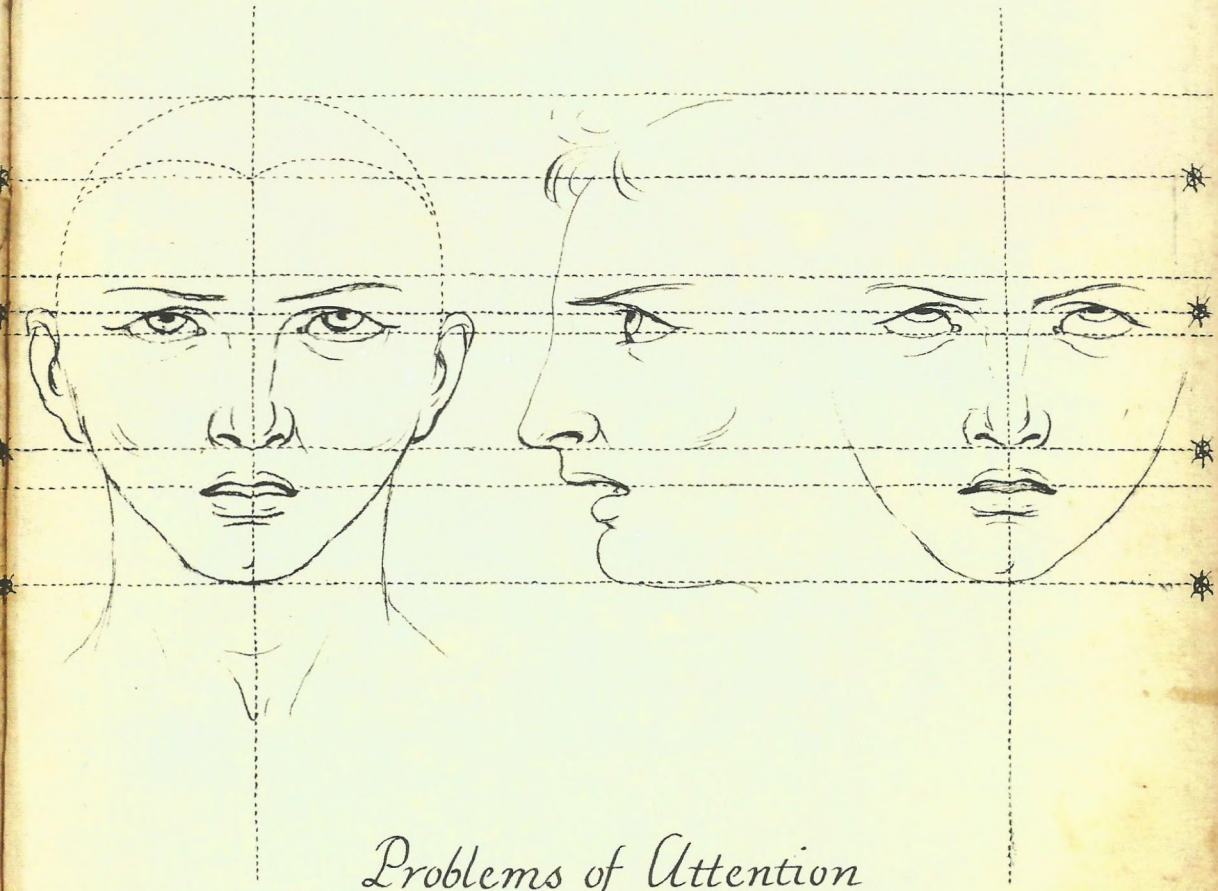
DISTRACTION



Problems of Attention in Eighteenth-Century Literature

NATALIE M. PHILLIPS

Early novel reading typically conjures images of rapt readers in quiet rooms, but commentators at the time described reading as a fraught activity, one occurring amidst a distracting cacophony that included sloshing chamber pots and wailing street vendors. Auditory distractions were compounded by literary ones, as falling paper costs led to an explosion of print material, forcing prose fiction to compete with a dizzying array of essays, poems, sermons, and histories. In *Distraction*, Natalie M. Phillips argues that prominent Enlightenment authors—from Jane Austen and William Godwin to Eliza Haywood and Samuel Johnson—were deeply engaged with debates about the distracted mind, even if they were not equally concerned about the problem of distractibility.

Phillips explains that some novelists in the 1700s—viewing distraction as a dangerous wandering from singular attention that could lead to sin or even madness—attempted to reform diverted readers. Johnson and Haywood, for example, worried that contemporary readers would only focus long enough to "look into the first pages" of essays and novels; Austen offered wry commentary on the issue through the creation of Lydia Bennet, a character with an attention span so short she could listen only "half-a-minute." Other authors radically redefined distraction as an excellent quality of mind, aligning the multiplicity of divided focus with the spontaneous creation of new thought. Laurence Sterne's *Tristram Shandy*, for example, won audiences with its comically distracted narrator and uniquely digressive form.

Using cognitive science as a framework to explore the intertwined history of mental states, philosophy, science, and literary forms, Phillips explains how arguments about the diverted mind made their way into the century's most celebrated literature. She also draws a direct link between the disparate theories of focus articulated in eighteenth-century literature and modern experiments in neuroscience, revealing that contemporary questions surrounding short attention spans are grounded in long conversations over the nature and limits of focus.

Distraction

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The idea for this book emerged eight years ago while I was people watching at an eighteenth-century conference. I was sitting in one of the first panels on cognitive approaches to literature. As it was nearing both the end of the day and the conference, people's minds had begun to wander. One person was chatting with her neighbor; another was hastily editing his own talk for later; a third had fallen obviously and loudly asleep. Though I had been happily working on a dissertation on eighteenth-century English beer brewers' resistance to tea drinking and the imported beverage's negative effect on sexuality, I had also just come across a key set of books on the history of mind: Patricia Spacks's *Boredom*, Barbara Benedict's *Curiosity*, Lorraine Daston and Peter Galison's *Objectivity*. Looking at everyone around me, I wondered: has anyone written on the history of distraction? When I turned to my neighbor at the end of the talk to ask, the response was pure excitement until I added something that would only have come up where I was sitting when the idea arose: *could you use cognitive science—in any way—as a part of this history?* The answer: an absolute "no." I immediately decided to try, and I devoted the next eight years to the book you now hold in your hands.

Instead of tea drinking and pornography, we have a book attended with distractions as legion as Pandemonium itself. One of the most intelligent (if impossible) bits of advice given to me as I was working was this: "Don't let yourself get distracted from *Distraction*." As one might imagine from the previous anecdote, the advice went enormously unheeded. Like all of us, I faced ever-accumulating diversions from writing: from the job market to teaching and faculty meetings, from my full e-mail in-box to the interruption (or allure?) of a new Facebook post. While working on my book, I also began to work headlong on a neuroscientific study: an fMRI experiment on readers' attention to Jane Austen. This book thus emerged, appropriately, amid chaos (χάος), the mythic gap that separated heaven and earth, and the original distraction (or pulling apart). The people who helped me balance the many moving pieces—and kept me from going to pieces—while writing *Distraction* are as numerous as were

the pieces pulling me apart. At Stanford, John Bender and Denise Gigante were pillars as cochairs; this book would never have existed without them or without the insights offered from all angles over time by various Stanford faculty: Joshua Landy, Seth Lerer, Franco Moretti, Jennifer Summit, Blakey Vermeule, and Alex Woloch. I'm also deeply indebted to my writing partner at Stanford, Steffi Dippold, who rescued me from many a poorly phrased sentence (and bout of insanity) as well as to the now far-flung colleagues from our Stanford-based writing group, the Round Table (Bridget Whearty, Hannah Dougherty, Bronwen Tate, Becky Richardson, and Jillian Hess), who offered immeasurable support as I wrote the first draft of the manuscript. The opportunity to work on this project at the Stanford Humanities Center (twice!), developing these ideas while surrounded by an interdisciplinary group of humanities scholars from literature, history, anthropology, classical studies, philosophy, music and beyond, meant not only incredible feedback early on but an unparalleled series of daily discussions over lunch, where we debated everything from historical shifts in attention span to the appropriate typography for an fMRI study of Jane Austen's *Mansfield Park*.

Much revision was to come before I reached something I was ready call a book. Fortunately, joining the English Department at Michigan State University —one of the most delightful and rewarding events of my intellectual career— meant I was able to continue this work in a congenial, vibrant space dedicated to interdisciplinary research and teaching. I am incredibly thankful for the invaluable advice and support of my colleagues at MSU. The faculty in English read portions of the manuscript, provided ongoing lively conversation about the work, asked and answered a barrage of professional questions, and supported me *en groupe* as I wrote *Distraction* amid flights to and from California, survived my first four years on the tenure track, and negotiated running an interdisciplinary lab in the humanities, Digital Humanities and Literary Cognition (the DHLC). Kristen Renzi is, in many ways, the saving grace of this book, reminding me (again and again) that there would *never* be a perfect, all-encompassing description of attention and distraction and that combining eighteenth-century history and cognitive science meant crafting new intellectual and rhetorical forms to talk about it. Steve Rachman—cofounder of the DHLC, coauthor of many an article and grant, and coteacher of a graduate course on cognitive literary history—mentored and encouraged me in my work at every moment he could, as did Judith Stoddart, Zarena Aslami, Justus Nieland, David Stowe, and Steve Arch. Outside the department, I found other colleagues interested in attention and distraction, all of whom contributed invaluable insights: the Kracauer-obsessed Germanist Matt Handelman; my friend and colleague in linguistics and the neuroscience of attention, Aline Godfroid; and Bobby Smiley, digital humanities expert, librarian, and chapter respondent extraordinaire. All

sat with me—and cheered me—over many a despairing or celebratory beer. Final thanks go to the unnamed many in our interdisciplinary young faculty group (fondly known as "Beggars") who met each Thursday eve and offered distractions aplenty with conversations about everything from forest biodiversity to legal rhetoric, diverting me from any book-associated obsessions with a barrage of Nerf water guns, plastic bows and arrows, and small launchable objects of every sort.

Distraction had the space to emerge as a project thanks only to the support of a wide range of grants and fellowships from institutions such as the Stanford Humanities Center, the ACLS and Mellon foundations, the Wallenberg Foundation, the TEAGLE Foundation, the Stanford Center for Neurobiological Imaging, and the College of Arts and Letters at Michigan State University. This book's argument also has been sharpened by the feedback and questions offered by engaged listeners at Duke, Stanford, Ohio State, the University of Arizona, Vanderbilt, NYU, the University of Michigan, Kent State, and both Lund University and Umea University in Sweden. It has been refined thanks to many a conversation with Jonathan Kramnick, Adela Pinch, and Suzanne Keen about the history of mind, as well as with Lisa Zunshine, Gabrielle Starr, and Alan Richardson about cognitive and neuroscientific approaches to literature. Throughout the writing of this book, I have been deeply influenced (and inspired), beyond what can be indicated in a citation, by key works on the history of attention such as Nicholas Dames's *The Physiology of the Novel*, Jonathan Crary's *Suspensions of Perception*, and Michael Fried's *Absorption and Theatricality*, as well as by a wide range of intellectual work by Lorraine Daston and Leah Price. Immense thanks go to my anonymous reader at Johns Hopkins University Press, as well as to my incredibly supportive editor, Matt McAdam, and his team at JHUP.

Some of my favorite anecdotes about writing this book have come from working on *Distraction* (literally) in the DHLC lab. One day, deeply absorbed in working by Skype with a student on revisions for chapter 5 (on divided attention!), I heard in the background that our brain data group for the Austen fMRI study had found unexpected sites of activation in new brain regions for literary analysis. Having an intellectual-conceptual appreciation of distraction and its history doesn't necessarily translate into practical *management* of that cognitive phenomenon; knowing more about it actually compounded the difficulty. While I was struggling not to notice this finding from our brain data group, I was metagiggling: part of me trying to concentrate on the chapter, another part observing—quite happily and pertinently—that I could not.

This book would not exist without the support of amazing student researchers in the DHLC. My student and colleague Austin Gorsuch sat by me each and every step of the way (either in person at Biggby coffee shop or by Skype), repeatedly honing ideas on the edge of articulation by way of a long walk and

turning prose edging on insanity—or diversion—into vibrant coherence. His brilliance is interwoven throughout this work. Katie Grimes, a young woman who will take over publishing someday with her rhetorical and organizational mind, took this project from a draft and turned it into a professional book. Many thanks go to Savannah Smith, who had the courage (to my endless delight) to join me in my self-critiques while revising the manuscript, answering my "Do you also think this sentence sounds like crap?" with "Yes. Let's fix it." Graduate students stepped in at crucial junctures throughout. Shannon Sears courageously stepped up to the first read-through, offering insights on everything from chapter structure to the military vocabulary of sexual vigilance in eighteenth-century conduct books. Nathan Leaman and Erin Beard supported me in tandem (and in the middle of the book) through the intricacies of the Gothic chapter, including wild divagations into microscopy and mathematics (the *focus* of a graph), the geological rhetoric surrounding eighteenth-century earthquakes (the *absorption* of cities into earth), and theories of blood clotting (my favorite examples of *concentration* of substances). Amid such tortuous windings of theory and prose, they repeatedly helped me avoid committing the very "sin" of fixated attention cum distraction the chapter describes. Laura McGrath read, edited, and improved (and most important, kept me from endlessly revising) each and every sentence in this book, demonstrating a professionalism and intellectual savvy enviable in a colleague, much less a postdoc or graduate student. She saw this project to its end, firmly moving this book toward final publication while juggling grant writing, research integrating digital humanities and literary neuroscience, and interdisciplinary lab leadership. Final thanks in the DHLC go to all the many students who helped guard my book-writing time amid the many distractions and delights of running an interdisciplinary lab. The inimitable intelligence, organizational savvy, and creativity of Craig Pearson, Kirsten Mayfield, Shan Kothari, Andrea Zuchora, Inez Garzaniti, Mohan Gupta, Kristina Persenaire, Lauren Straley, and Lana Grasser, among so many others, made this book possible to write.

Along with the DHLC, this book is dedicated to my family, both real and adopted. My mom, dad, and uncle have supported me through thick, thin, and topsy-turvy. It is impossible to fully thank them for their love and their support, much less their ever-present engagement with the book process (and forgiveness of my absentmindedness). Finally, I wish to thank Devin, Madeleine, and Leif, who provided the perfect balance between focus (three-day dives into *Tristram Shandy*, color-coded time lines) and diversion (as the sticky zombies on the ceiling will attest). According to Diderot, though distraction can leave one scatterbrained to the point of rudeness, it can also be a catalyst of intellectual liveliness and spontaneous insight: "an excellent quality of mind." During long walks by the river, chalk drawing on the sidewalk, and dancing impromptu in the driveway, you made this real. Thank you.

Distraction

The Literary History of Distraction

When most people think of distraction, they think of flooded in-boxes, cell phone beeps, Twitter feeds. An ever-present and unavoidable consequence of our fast-paced contemporary world, distraction is cast as a (if not *the*) mental state of modernity. Becoming the age of attention deficits, however, relies on the construction of an imagined surplus of attention elsewhere—for us, the past. Whatever came before—be it childhood, our parent's generation, or the Enlightenment—must have been, according to popular mantra, a more attentive age. James Gleick argues in *Faster* that our modern moment is characterized by "a compression of time"; his examples of our accelerating impatience: the speed-dial button on cell phones; elevators' "DOOR CLOSE" button "with no function but to distract . . . riders to whom ten seconds seems an eternity"; remote controls carefully designed for "the hands of a quick-reflexed, multitasking, channel-flipping, fast-forwarding citizenry."[1] The rapid-fire exchange between accelerating technology and cognition causes distraction—or so the story goes.

Yet even a brief foray into distraction's history complicates this idea of ever-increasing diversion, discouraging any nostalgia about an idyllic past of easy attention, particularly when we think—as literary scholars often do—about the history of reading. Rather than a quiet environment in which audiences were always found absorbed, or "lost in a book," eighteenth-century poets and artists from Swift to Hogarth describe reading as occurring amid high cacophony:

chamber pots sloshing, street noises and hubbub, wailing street criers "screeching" to advertise their wares.[2] If we complain today of 140-character tweets and media oversaturation, eighteenth-century writers worried about readers facing a surreal mixture of industrial, vocal, and by consequence, literary tumult. Gay's *Trivia* offers us this soundscape of London street life: "Now industry awakes her busy sons, / Full charg'd with news the breathless hawker runs: / Shops open, coaches roll, carts shake the ground, / And all the streets with passing cries resound."[3] In this environment, to which we attribute an almost mythical sense of calm and quiet, authors were deeply concerned about rising levels of distraction amid the century's multiplying urban diversions, diversification of popular media, and print overload.

Many people both presumed and complained of novels' unusual ability to capture attention. Yet as William Warner reminds us, the novel was just one element within a "larger cultural history of print entertainment"; prose fiction competed with a flood of essays, poems, sermons, and histories.[4] The ongoing expansion of the book trade in the eighteenth century inspired a further flourishing of reviews, anthologies, and summaries meant to manage this literary surplus, which, paradoxically, only increased the amount of texts available. In 1749, Ralph Griffiths's *Monthly Review* officially declared the need for a reliable mechanism to review (and help readers manage) the barrage of print, a magazine designed to help readers select from the general chaff "those productions of the press . . . that are worth notice."[5] According to scholars working in the history of the book, however, such works only added to the sheer volume of reading material they claimed to be resolving.[6] In his introduction to the *Dunciad Variorum* of 1729, Alexander Pope describes a world in which information floods England: "Paper has become so cheap, and printers so numerous, that a deluge of authors cover the land." London—and its readers' attention spans—drowns under a tidal wave of print.[7] In this competitive print economy, a growing number of writers believed their books would greet audiences with limited capacities for attention. Whether audiences were reading silently—or as so often the case in the eighteenth century, aloud—authors feared that information overload and the city's rising hubbub (much less the diversion of a loud conversation nearby in the coffeehouse or an audience member's loud sneeze in the middle of a novel reading) would impinge on, and possibly end, the act of reading. Samuel Johnson and Eliza Haywood quipped about audiences' limited ability to concentrate amid this flood of books and sensation. Even facing short essays, Johnson jokes, readers only "looked into the first pages"; Haywood suggests readers' attention will be caught or lost in the first few minutes, or "the four or five first Pages."[8] By Jane Austen's *Pride and Prejudice* of 1813, Lydia Bennet is described as having an attention span of no longer than "half a minute."[9]

When we speak of novel reading in the eighteenth century, we normally talk of absorption—of rapt, immersed readers—and of books that leave a dangerously deep impression on the mind. This vision of Enlightenment reading taps a tradition that stretches back to *Don Quixote* (1605–15), whose main character is so absorbed in romances that it distorts his perception of everyday life. This fascination with readers intent on (or lost *in*) a book is best summarized by Michael Fried, who calls the aesthetics of absorption a "master configuration" of the Enlightenment.[10] There was, however, an equally powerful figure circulating in the eighteenth century: the distracted, and distinctly *un*absorbed, novel reader. As one everyday reader, Elizabeth Gurney, confessed to her journal, "I find it difficult to confine my attention to what I am reading; books tell us to think clearly and fix our ideas to the subject before us; I wish they would tell us how."[11] Sterne's *Tristram Shandy* won audiences with its comically distracted narrator unable to focus. One of this book's central arguments is that eighteenth-century writers increasingly sought to forge literary structures meant to *work with*, rather than reform, distracted readers. The result was a new aesthetics of distraction that interwove market pragmatism, Enlightenment theories of cognition, and literary experimentation.

This innovation cast the challenge of managing audience attention as *the* defining quality of modern authorship. Satirists such as Jonathan Swift turned the potential of a distracted readership into a springboard for comedic verse. His "Verses on the Death of Dr. Swift, D.S.P.D." (1739) joked that print overload would render his works outdated before the year was out; readers looking for his poems will find booksellers have just sent them "with a Load of Books, / Last Monday to the Pastry Cooks,"[12] their pages being ripped out and used to wrap baked goods. Defoe's best seller, *Robinson Crusoe* (1719), opens by describing its hero's predisposition for physical and mental wandering, using Crusoe's confession—"my Head began to be fill'd very early with rambling Thoughts"—as a prompt to narrate his adventures.[13] Christopher Smart's experimental *Jubilate Agno* (1759–63) devotes seventy-four lines to his "Cat Jeoffry," praising (and poetically modeling) the "passing quickness of his attention." Acknowledging a similar swiftness and mobility in the focus of young readers, the famous eighteenth-century publisher John Newberry capitalized on children's short attention spans by selling books alongside toys: a ball for boys, a pincushion for girls, presuming the need to incorporate varied entertainments—as well as spaces for distraction—into sustained attention to a book. In each case, authors, publishers, and booksellers translate contemporary ideas about distraction into a set of literary and economic devices meant to claim a hold on readers' focus. Amid print oversaturation, writers drew on the century's debates surrounding concentration to produce a rich arsenal of textual devices that could capture attention (as well as simulate the supposed liveliness and productivity) of distracted thought.

The present volume joins a growing body of scholarship on the history of mental states, such as Patricia Spacks's *Boredom*, Barbara Benedict's *Curiosity*, and Lorraine Daston and Peter Galison's *Objectivity*. Here I turn to distraction, revealing our modern debates about short attention spans and attention deficits to be grounded in long-standing eighteenth-century controversies over the nature and limits of focus. Tracing these parallels between our modern discourses on distraction and the complaints of the eighteenth century need not ignore historical difference. A modern reader who approaches eighteenth-century conversations about attention will encounter a powerfully dissonant, if at times strangely familiar, historical lexicon. For much of the eighteenth century, attention was something to be "fixed" or "bent" toward an object, not "paid." According to René Descartes, when we "fix our attention," the soul (which he located in the pineal gland) drives the animal spirits toward the appropriate "pores of the brain" and keeps the gland leaning in that direction to sustain focus.[14] Samuel Johnson defines attention in his *Dictionary* as "the act of . . . heeding, or . . . bending the mind," and later offers an example of this capacity flagging in sickness: "When he fell into the gout, he was no longer able to *bend* his mind or thoughts to any publick business. *Temple.*"[15]

One of the goals of this book is to trace these changing meanings across the eighteenth century, intertwining literature, history of science, and philosophy of mind to reveal a key shift in cultural attitudes surrounding attention that influenced both how the period conceptualized distraction as a cognitive phenomenon and how authors sought to get and hold the attention of their readers. Specifically, I map the emergence of two competing paradigms for understanding distraction: a *unifocal* model, which held that attention was singular, with distraction merely a "straying" from the intended (or natural) object of focus; and a *multifocal* model, which held that attention was inherently multiple and distraction merely a part (or consequence) of the mind's potentially infinite experiences as the brain processes a plethora of environmental stimuli. The first theory, grounded in an older tradition of religious meditation, emphasized the virtues of paying attention to one thing (and only one thing). It portrayed distraction as a sin, the mind literally wandering from the way of God. The second theory, only fully realized in the Enlightenment, challenged this ideal of the undistracted mind. Philosophers from John Locke and Gottfried Leibniz to David Hume and William Godwin began to redefine attention as an ongoing process of coordinating and cognitively orchestrating responses to multiple stimuli. No longer portrayed simply as a wandering from the ideal line of attention, distraction could also be imagined as an idiosyncratic offbeat—a potentially productive cognitive pause, or syncopated thought—in time. In 1754, Denis Diderot made a radical claim about the unfocused mind:

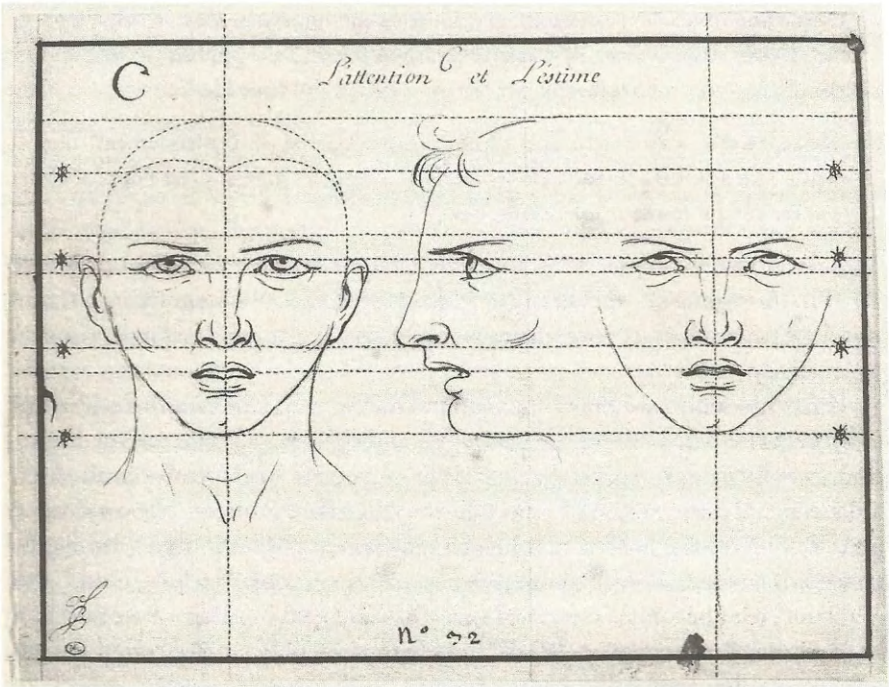
> Distraction arises from an excellent quality of the understanding, which allows the ideas to strike against, or reawaken one another. It is the opposite of that stupor of attention, which merely rests on, or recycles, the same idea.
>
> [La distraction a sa source dans une excellente qualité de l'entendement, une extrême facilité dans les idées de se réveiller les unes les autres. C'est l'opposé de la stupidité qui reste sur une même idée.][16]

This argument for distraction's cognitive benefits marked a revolutionary moment in the eighteenth-century history of mind. Rather than signifying a truant mind off path, adrift, or torn, distraction's multiplicity was reimagined as a spur to creativity.

I take this oddly celebratory moment in Diderot and d'Alembert's *Encyclopédie* as a starting point to trace the literary history of these competing theories of distraction, as well as the productive dissonance between them. Eighteenth-century literature is full of distracted characters: Johnson's digressive Rambler, the overloaded and discombobulated Tristram Shandy, Haywood's easily diverted (and highly gendered) coquette Betsy Thoughtless, even Godwin's obsessively focused Caleb Williams, who becomes so focused that a house could burn down around him without the hero noticing. While Enlightenment philosophers often sought to theorize about attention and distraction in the abstract, authors sought to portray these mental states in intricate everyday detail, imagining a distracted character's mind as it moved through a complex narrative world. Literature, writes David Lodge, offers one of "the richest and most comprehensive . . . record[s] we have of human consciousness," with the prose novel uniquely able to capture "the dense specificity of personal experience" in the individual human mind.[17] In working to represent the experience of distraction in language, these works adopted, combated, and synthesized the century's reigning theories of attention, advancing each by playing out their consequences in virtual scenarios: the inattentive Miss Thoughtless at the playhouse, the scatterbrained Parson Yorick losing a sermon, etc. These descriptions of the fictional mind participated in the creation of a paradoxical yet productive cultural dualism in attention theory that continues to this day. One of my book's central arguments is that literature played a pivotal role in shaping modern ideas about distraction, from everyday conversations about multitasking and distracted driving to neuroscientific experiments on how long we can pay attention, from our shrinking attention spans to the cult of study in academia that praises the benefits of sustained focus in students.

The Unifocal and the Multifocal

Since the classical period, the dominant model of attention in philosophical, cultural, and scientific circles has been the unifocal model, which associates attention



Charles Le Brun, *L'Attention et L'Estime*, 1668; © RMN–Grand Palais / Art Resource, New York.

with virtue and distraction with vice. First Corinthians 7:35 urged the pious to "attend upon the Lord without distraction," a dictum supplemented by the Book of Hours and other devotional systems that encouraged sustained attention to God hour by hour.[18] In the Enlightenment, these virtues of unifocal attention extended into secular descriptions of cognitive discipline. René Descartes's *Meditations on First Philosophy* (1641), for example, declares: "By attentive and repeated meditation . . . I get into the habit of avoiding error. For I shall unquestionably reach the truth, if only I give [it] sufficient attention."[19] Those who adopted this classical view—with all its moral connotations—traditionally conceptualized attention as a single line of focus, imagining it as a fine, taut beam stretching between eye and object.

French painter Charles Le Brun illustrates this visual emphasis (and the linearity of unifocal attention) in his *Treatise on Understanding the Expression of the Passions* (1668). In Le Brun's drawing, the figure's focus stretches from right to left toward an imaginary object representing attention as a perspectival line. The man's gaze models the directedness of his mind, the linearity of his concentration the very sign of attention's power.

Arguments for the virtues of attention relied on the belief that focus was voluntary and intentional. Only thus could one be held responsible for the sins of distraction: both the moral transgression of worldly thought and the intellectual sin of mind wandering. Philosopher James Beattie synthesizes the visual and moral metaphorics of unifocal attention, defining attention as a strict focus on whatever we are "engaged" with—that is, "doing only one thing at a time." For Beattie, the childhood phenomenon of lazy eye becomes a sign of bad character. The "unsteadiness" of a wandering eye reveals "a listless temper, a wandering or bewildered attention" as well as an intrinsic ugliness, an aesthetic wrought from "unpleasing ideas" that "rather dissatisfy, than interest us."[20]

During the eighteenth century, however, a group of thinkers questioned this unifocal model of attention. John Locke's *Essay Concerning Human Understanding* (1660) claims, for example, that in a single day "The mind employs it self . . . with several degrees of Attention," ranging "between earnest Study, and very near minding nothing at all."[21] In *A Treatise on Human Nature* (1739–40), Hume declared that man is simply a "bundle or collection of different perceptions, which succeed each other with an inconceivable rapidity . . . and may leap from the heavens to the earth . . . without any certain method or order."[22] Diderot revels in this multiplicity of wandering cognition in *Rameau's Nephew* (ca. 1761–74) comparing the philosopher lost in thought to a rake who pursues multiple women at once: "I'm the person you see always sitting alone on the bench in the allée d'Argenson, my mind elsewhere. I hold discussions with myself on politics, love, taste or philosophy, and let my thoughts wander in complete abandon, leaving them free to follow the first idea that comes along, wise or foolish, like our young rakes . . . running after a prostitute with a giddy look, a laughing face, a sparkling eye and a tip-tilted nose, only to leave her for another, accosting them all and staying with none."[23] This emphasis on the endlessly moving mind made it far harder to define attention as something that could be steadily *fixed* or *bent* in space and refocused interest on how attention moved and changed in time. A rising number of writers proposed that attention itself could be multiple; we think, as Leibniz put it, of "many things all at once."[24] This is the joke behind Diderot's famous description of polyamorous thought that ends the quotation above: "my thoughts are prostitutes to me" (mes pensées, ce sont mes catins). Those who adopted this multifocal stance moved away from the linear metaphors of the older model of concentration to adopt a rhythmic—almost orchestral—conception of attention. Whereas the unifocal view of attention was spatial, or linear, this new modern paradigm imagined attention as an ongoing process of synchronizing and harmonizing many points of concentration in time, the sign of a dynamic mind in constant motion. In this more morally neutral cognitive landscape, descriptions of distraction's cognitive value flourished.[25]

Though reframed each time to fit a new cultural, historical, and psychological environment, these models of focus have a strange power, shaping frameworks for cognitive discussions throughout the Romantic and into the Victorian period. Nineteenth-century literature not only conceived of distraction as a form of "negative liberty" from bourgeois focus, Nicholas Dames notes, but did so through an interchange with physiological theories of attention that emphasized the "temporality of reading" and took readers' changing "speed, pace, attention span, engrossment, mental concentration, and drift" as its central point of interest.[26] In his *Principles of Psychology* (1890), William James famously declared attention unifocal. "Every one knows what attention is," he wrote confidently: "It is the taking possession by the mind . . . of one out of what seem several simultaneously possible objects or trains of thought," a state of mind he sets opposite "the confused, dazed, scatterbrained state which in French is called *distraction*"; if attention models a singular "focalization, concentration, of consciousness," distraction's multiplicity produces irreconcilable confusion.[27] A few years later, Charles Richet's *Dictionnaire de physiologie* of 1895 appeared, where contributions from psychologists Pierre Janet and Alfred Binet emphasized the multiplicity and dynamism of focus: "in a word," as they put it, "attention undergoes oscillations" (en un mot, l'attention subit des oscillations).[28] Binet's *The Mind and the Brain* (1905) explicitly countered James, arguing that consciousness "may embrace at the same time a variable number of objects. I can pay attention to several things at the same time."[29] Pierre Janet, in fact, suggested excessive concentration could "suppress" or reduce the total contents of consciousness and highlighted the potential "negative effects of attention," which in its most extreme manifestation became *l'idée fixe* of monomania and hysteria.[30]

This ongoing competition between unifocal and multifocal—with each paradigm's philosophical (and moral) assumptions about attention and distraction's nature—appears, refracted through a contemporary lens, in modern cognitive science. The unifocal model, with its linear metaphors and emphasis on attention's virtues, has evolved into what cognitive scientists today call the "spotlight" theory of focus. This largely visual model defines attention as a selective act of concentrating on a single set of stimuli, ignoring others.[31] In his work on the neurophysiology of attention, vision scientist Brad Motter emphasizes that attention is normally "focused where one looks—usually where the eyes are fixating" and cites a series of studies that suggest "focal attention is directed at a single locus (object) at a time."[32] Yet as a flourishing body of research in visual, auditory, and kinesthetic attention reminds us, what we look at is not always what we attend to. The multifocal paradigm has also become incorporated within a second movement in cognitive studies of focus, particularly studies of multitasking, cross-modal attention, and situational awareness. These contemporary models advance a rhythmic, multitiered model of concentration,

exploring "how temporal structure guides attention on a moment-to-moment basis," attention's role in parallel processing, and how we parse, recombine, and otherwise structure the dynamic stimuli that compose our daily lives.[33] According to this view, attention is intrinsically multiple, a network of "brain circuits that prioritize, integrate, and . . . orchestrat[e]" our complex mental life.[34] The multifocal philosophy of the Enlightenment, with its more temporal metaphors of mind, its focus on diverse—at times simultaneous—sensory processing, and its inclusion of unconscious perception and spontaneous attentional capture under attention's cognitive rubric has become an influential model for neuroscientific studies.[35]

This modern theoretical divide reflects what leading neuroscientist Michael Posner calls the "long-standing controversy of whether the spotlight of spatial attention has a unitary 'beam' or [whether it can] be divided between spatially separated locations."[36] Yet Posner is thinking back only to the early twentieth century. If modern cognitive science is replaying the very Enlightenment debates over attention that are taken up and expanded in the century's fiction, essays, drama, and verse, its literature and art—the novel in particular—played a far larger role in shaping our current theories of mind than one might expect, with influences on design that stretch into our iPhone applications and alert systems in airplane cockpits, as well as the experimental frameworks of neuroscientific studies.

The Rise of the Distracted Character

If the century's competing theories of attention were the source of inspiration for a crucial series of aesthetic experiments with distraction that transformed the shape of eighteenth-century literature—from the titles of its novels to the structure of its poetry—then we need a new model for understanding everything from the so-called rise of the novel to the history of reading, as well as the interplay and competition between genres vying for readers' focus. Our traditional stories of the novel's eighteenth-century genesis, for example, theorize the genre as responding to a larger attempt to represent middle-class readers (Ian Watt), the categorical instability around cultural questions of "how to tell truth in narrative" (Michael McKeon), and constructions of personhood and thought (Nancy Armstrong). Yet to depict the middle class to middle-class readers, to "tell truth in narrative," or to construct subjectivity, a book must first sustain a reader's attention to its story. In responding to changing beliefs about readers' focus, moreover, authors produced new literary forms—from the rambling, idling personae of Johnson's essays to the distraction-conscious chapter titles such as "Will Not Tire the Reader" in Haywood—intended to hook and sustain the concentration of an audience believed to have waning attention spans. These choices, in turn, shaped audience's habits of focus. As Clifford Geertz

recognized long ago, "art forms generate and regenerate the very subjectivity they pretend only to display. Quartets, still lifes, and cockfights are not merely reflections of a pre-existing sensibility analogically represented; they are positive agents in the creation and maintenance of such a sensibility."[37] And if ideas about distraction from fiction, poetry, and prose had a powerful impact on the century's theories of focus, as I argue here, the theories and art of attention also profoundly shaped the layperson's everyday experience of distraction.

The eighteenth century is when we first see distraction being widely used to describe everyday problems of attention. In many cases the term continued to refer to madness; if attention, from the Latin *ad-tendere*, "to stretch toward," connoted an active reach of thought, distraction—from *dis-trahere*, "to pull or drag apart,"—evoked a mind divided. Used throughout the early modern period to describe divisions of all kinds, warring governments, legally separable property, broken bones, ruptured vessels, etc., it also came to suggest a mind ripped apart at the seams, a meaning that continued into the eighteenth century. Yet in the eighteenth century, distraction could denote an object (*a distraction*: the thing that diverts me); a moment of unintended interruption (I was *distracted* from my work); a desired but socially nonnormative point of attention (an immersion in reading romances, for example, rather than cooking for the family); or a planned diversion (a political or personal ploy). It could mark a short moment of interrupted focus amid proper attention (as William Bonde admitted as early 1526, "Harde it is to say one Pater noster without *distraction* of the mynde")[38]; alternatively, it could describe an extended—deeply habitual—cognitive state. Those of the Enlightenment were increasingly interested in the latter: distraction rendered a personality trait. If, as Sianne Ngai argues, modern aesthetic categories like zaniness "revolve around our experience of a zany character," a person "charged with the affective task of activating our sense of humor by being, as it were, 'a character,' " Enlightenment distraction was also typified by a distinctive set of character types whose pseudocomic task was quite serious: to theorize and work through the cultural problems of focus.[39]

This book focuses on figures defined by their predisposition to wandering focus, scattered minds, and other forms of chaotic or disorganized thought. The distracted character, most scholars agree, first appeared on the literary scene explicitly in the seventeenth century with *la distrait* of Jean De La Bruyère's *Les Caractères* (1688).[40] His Menalcas, the satiric character who embodies a wide range of "absent-minded" traits—always losing his wig, running into things, and failing to note his comically disheveled state—at first seems a mere update on the Renaissance fool. Yet his comic behaviors revolve around a particular habit; he is foolish because he is inattentive, diverted from his surroundings and from himself. In the morning, he runs out the door (after opening and shutting it several times) before realizing he still has his pajamas on, is only "half shaved,"

and has left his socks hanging out of his shoes. In the seventeenth-century equivalent of looking for one's glasses while they're sitting on one's face, "[h]e searches about, rummages, shouts, gets excited, calls his servants one after another, and complains that everything is lost or mislaid; he asks for his gloves which he holds in his hands."[41] As Paul North notes, this interest in "not-thinking" presented a crucial counterpoint to the Enlightenment emphasis on mankind's value as conscious beings, the cliché of Descartes, "Cogito, ergo sum."[42] Distraction, as such, comes to represent both the tacit—and often unacknowledged—rejection of the things to which one needed to be paying attention (e.g., the church, the state, the school, the husband); more, it begins to stand in for the many aspects of human behavior—our endlessly misplaced gloves, our half-forgotten sentences, our lost places in a book—that fall outside of the parameters of rationality-driven consciousness.

Drawing on such predecessors—a tradition that included not only Bruyère but writers from Montaigne to Cervantes—eighteenth-century writers translated the problem of "not-thinking" into a productive literary conceit, drastically expanding the traits of a distracted figure beyond absentmindedness.[43] Bringing together a constellation of works from the second half of the eighteenth century—Samuel Johnson's *Rambler* (1750–52), Eliza Haywood's *Betsy Thoughtless* (1751), Laurence Sterne's *Tristram Shandy* (1759–67), William Godwin's *Caleb Williams* (1794), and Jane Austen's *Pride and Prejudice* (1813)—I show how authors reconceived the figure of distraction to include not only a wandering mind but an addiction to urban novelty and cognitive overload, multitasking, and rapid, scattered flights of thought, even a focus on one thing to the exclusion of all else. Like Jonathan Crary, whose *Suspensions of Perception* incisively reveals art's role in nineteenth-century attention theory, "my intention is not to position . . . a work . . . as either symptomatic of or determined by any of the discursive objects and institutional spaces to which I refer. I am insisting that certain works, and the specific aesthetic practices on which they are founded, are *constitutive* elements of that same field of events, that they are *original* fashionings of related problems."[44] The works of Johnson, Haywood, Sterne, Godwin, and Austen become centerpieces in this book because of this original fashioning; experimenting with narrative and poetic forms of distraction, they not only extended and reconceived philosophies of cognition but developed a complex metaphorics that turned the century's debates over attention into new aesthetic strategies for managing the inattentive reader. Eighteenth-century literature thus marks a key intersection of distraction's often mercurial meanings—religious, medical, philosophical, legal, etc.—producing an idiom crucial to understanding our contemporary language for describing the diverted mind. On the one hand, then, my interest is in the intersection of narrative structure and the history of cognition; this book demonstrates how portraying

distraction in fiction gave rise to new strategies for plot, focalization, style, and characterization. At the same time, I'm interested in the questions these literary-cognitive experiments with focus open up for cognitive narrative theory. As I explore the friction among Enlightenment theories of concentration, my goal is to blend the tools of literary history, narratology, and applied cognitive science to model a richer method for analyzing literature in terms of attention—that of both characters and readers—that emphasizes the historical coadaptation of attention theory and aesthetics.

First, I describe an emergent rhetoric of distraction in eighteenth-century literature, particularly the novel and the essay, that sought to use diverted characters to attract (and reform) overwhelmed readers. As Ann Blair notes, "We describe ourselves as living in an information age as if this were something completely new. But the perception of and complaints about overload are not unique to our period. Ancient, medieval, and early modern authors . . . articulated similar concerns, notably about the overabundance of books and the frailty of human resources for mastering them."[45] In the eighteenth century, however, an economic battle for readership explicitly became a battle for readers' attention. Though their goal was not always to indulge a potentially flighty audience, eighteenth-century writers were newly interested in creating literary forms to accommodate distracted readers. In particular, this book takes up the narrative dynamics that lie behind what Leah Price has called the "stop-and-start rhythm" of eighteenth-century reading, changing paces that rely on an audience knowing "when to skip," skim, and linger, and points toward a larger intersection between changing theories of mind and evolving literary aesthetics.[46] Second, I show how the rise of a literature of distraction coincided with a larger reimagining of the unfocused mind as a potentially generative force. Finally, I argue that these literary depictions of scattered, inattentive characters and the development of a larger aesthetics of the unfocused mind provided a more nuanced framework for articulating the subtleties and complexities of the cognitive experience increasingly known as distraction, thus reframing (and advancing) otherwise abstract debates over attention in religion, philosophy, and science.

As my focus is on the intellectual history of a concept, not just uses of the word, this book does more than provide a history of how those of the eighteenth century used the term *distraction*. Where the former model would focus primarily on descriptions of the mad, the melancholic, and the lovesick—by far the most common uses of distraction—I use its etymology and literary depictions of distraction to explore how we came to hold our modern ideas about the scattered, divided mind. Today, we tend to use the word *distraction* to refer to a minor, everyday diversion of focus, an annoyance that interrupts us, or to an ingrained—potentially diagnosable—personality trait that leads to unexpected digressions, forgotten thoughts, and general obliviousness (ADHD).

One danger here, of course—the controversy behind much contemporary work in cognitive literary theory—is the assumption that such modern concepts can be retroactively applied. Discussing our need for a rigorous methodology for the history of "emotional life," Lucien Febvre warns against "wanting to switch directly . . . from feelings and ideas belonging to ourselves to feelings and ideas that similar words or the self-same words seem to describe perhaps several centuries back in time; such words can cause the worst sorts of confusion by persuading us that they have the same meanings as the ones we know."[47] The present study builds on this model; one of this book's central hypotheses is that contemporary feelings and ideas about the diverted mind emerge, reconceived and refigured, from the historical.

In her literary history of boredom, Patricia Spacks eloquently resolves a second conundrum we face in cognitive historicism: "It is by no means essential to . . . maintain that [a state of mind] came into existence only when it was first named. One can never prove that a new feeling has entered the world." She continues: "The emotion Shakespeare's Hippolyta experiences may in fact have precisely corresponded to what we understand as boredom, but the language assigned to her emotion differs from the twentieth-century vocabulary of boredom, and I maintain the importance of the difference. . . . Boredom was in the eighteenth century a new concept, if not necessarily a new event. The emergence of a new concept marks a significant cultural happening because it allows articulation of fresh ways to understand the world."[48] I extend this work in the history of mind to ask how we came to use the terms "distraction" and "attention" as presumed opposites to organize the concept of the mind and which artistic, philosophical, and scientific discourses interwove in the eighteenth century to make our modern viewpoints possible. In so doing, however, I also upset teleological claims about ongoing scientific advance when it comes to cognition, revealing how various theories of (and debates over) distraction rise, fall, become revivified or forgotten, splinter and synthesize over time in relationship to shifting historical influences, including class, religion, gender, and the economic pull of a public readership.

Attention, Distraction, and Enlightenment Philosophy of Mind

Crary declares that the Enlightenment had no need for—and thus no profound impact on the history of—theories of focus. Defining the period as dominated by an impression-based psychology and ruled by "models of a mind as passive receiver of sensation," he claims that "eighteenth-century British philosophy . . . had no need of an idea of attention."[49] Yet, as we will see, attention was a crucial category in Enlightenment philosophy of cognition. In fact, John Locke defines "thinking" itself as an act of "attention."[50] Lord Kames maintains that attention is the essential "state of mind which prepares one to receive impressions"

and thus necessary to sensation-based philosophy.[51] And Thomas Reid declares attention the core faculty for acquiring "a distinct notion of any object or thought."[52] As critics from Margaret Koehler to Michael Hagner note, attention was a "prominent and urgent component of the eighteenth-century preoccupation with perception," used to "map a continuum of modes of mind."[53] Rather than retracing a familiar age of reason, we can also speak of an Enlightenment age of attention. This book makes a seemingly simple argument about the role attention and distraction played in eighteenth-century philosophy: that these two mental states, intertwined and codefining, were the ones best suited not only to grasp the changing relationship among authors, publishers, and readers in eighteenth-century culture but also to spark conversations that productively reframed Enlightenment theories of mind. In eighteenth-century studies, discussions of attention and distraction also help reveal the philosophical blind spots of association and sensationalism as theoretical models for discussing the variability and depth of human cognition.[54]

Discussions of distraction contributed with particular strength to larger philosophical conversations about how the surrounding world "impressed" itself on the mind and how much stimuli one could cognitively take in. One's environment, the theory went, contributed in no small part to cognitive discord; many directly blamed shortening attention spans on urban cacophony. As Tobias Smollett's curmudgeonly Mr. Bramble complains in *The Expedition of Humphry Clinker* (1771), people are "every where, rambling, riding, rolling, rushing, justling, mixing, bouncing, cracking, and crashing in one vile ferment . . . —All is tumult and hurry"; the city and its inhabitants suffer from a collective "disorder of the brain, that will not suffer them to be at rest."[55] Such language not only bespeaks Enlightenment philosophy's widespread belief that environment shaped cognition; it also reflects the broader sense of cultural crowding as well as the discordant blur of aristocratic boundaries in city space. What so bothers Smollett's misanthropic Bramble is not merely the number or rush of people; it is that the "different departments of life are jumbled together"; the "hod-carrier, the low mechanic, the tapster, the publican, the shop-keeper, the pettifogger, the citizen, and courtier, *all tread upon the kibes of one another*."[56]

The eighteenth century saw the rise of what we now think of as "noise pollution" as well as its class-ridden architectural remedy, soundproofing.[57] William Hogarth's *The Enraged Musician* (1741) perhaps best captures the chaotic soundscape of eighteenth-century London that these new technologies sought to shut out as well as noise's perceived power to upset—and reshape—the Enlightenment mind. Hogarth's upper-class musician, high in his brick-gated house, finds his classical music practice interrupted by the surge of sounds outdoors. Opening his window, he greets a symphony of intermixed noise: the squeal of an oboe, a bawling ballad singer advertising her wares, drums, barking dogs,

William Hogarth, *The Enraged Musician*, 1741. V&A Images, London / Art Resource, New York.

the pump and grind of sharpening knives, a distant horn, hissing cats, and the sound of a boy pissing below.

The Enraged Musician illustrates this daily chaos by pulling our attention in multiple directions. To capture the dissonance of the scene, each figure evokes a unique tone and patterned sound far from in "tune" with the rest. The child's imagined drumbeat catches against the rhythmic knife-scraping and the horn's blares, a beat that syncopates the dissonance of the yowling cats and the ballad singer's croons; the oboe's melody plays hopscotch with the barking dog at the knife grinder's feet. Evoking both what Swift called the coal seller's husky cry, "with Cadence deep," and the "Shriller Notes of Chimney-Sweep," Hogarth captures the chaotic, competing rhythms of multifocal sound.[58] Only the milkmaid centers the image: lips parted, she greets us just *about* to sing, adding her cry to the hubbub.

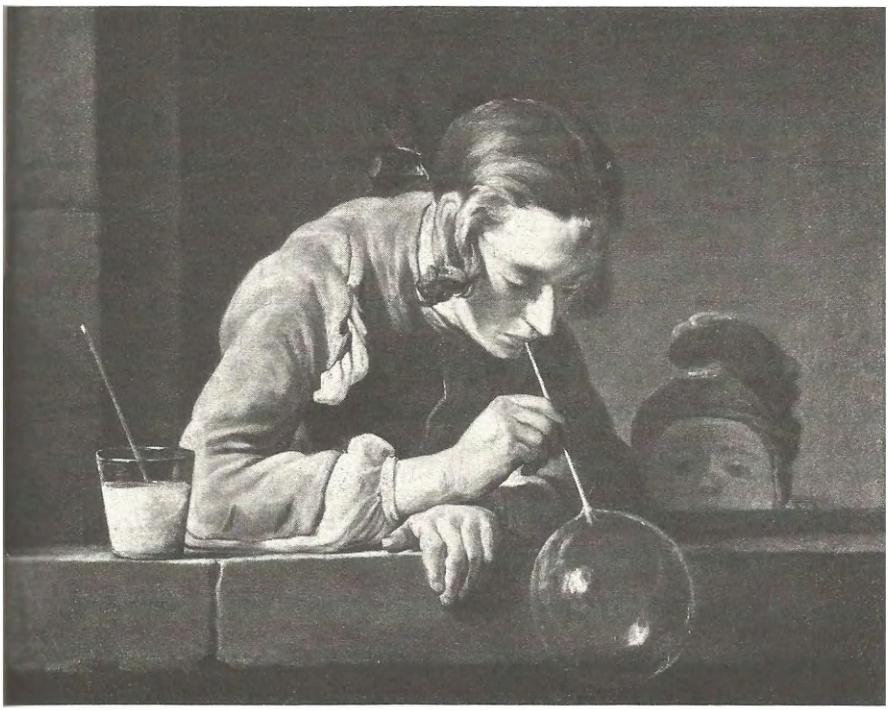
Amid what William King called this "hideous Din," the question remained: how could one sustain attention to a single object, be it a novel, a piece of classical music, a scientific experiment, or even an everyday conversation on the street?[59] How could one pay attention at all? While Hogarth's working-class

figures may seem able to focus amid cacophony, traditional eighteenth-century critics emphasized the innate distraction of the multifocal embodied by urban sound. Isaac Watts's advice in *The Improvement of Mind* (1741) emblematizes this intellectual policing of sites for reading. Believing such environments could dangerously sway focus, his chapter "Fixing the Attention" urges readers to avoid reading in chaotic, interruption-prone spaces, particularly notorious areas of metropolitan London such as Piccadilly Square or South Bank: "Don't chuse your constant Place of Study by . . . the most various and entertaining Scenes. . . . [A] variety of Objects which strike the Eye or the Ear, especially while they are ever in motion or often changing, have a natural and powerful tendency to steal away the Mind too often from its steady Pursuit of any Subject which we contemplate; and thereby the Soul gets a Habit . . . of trifling and wandring."[60] Studying in the wrong part of London can produce lifelong cognitive patterns; enough environmental exposure to diversion renders even attentive study a character (and mind) reshaping risk.

The desires of the everyday eighteenth-century reader were believed to be saturated by this chaos, producing an addiction to novelty and multiplicity. In his *Illuminations* (1938), Walter Benjamin famously claimed that modernity is defined by the reception of "art . . . in a state of distraction," taking cinema as his central example.[61] Yet Smollett suggests this state of affairs predated film (and Benjamin) by almost two centuries. According to Smollett's Mr. Bramble, his contemporaries lived in an environment of ever-accelerating stimuli—pedestrians "run[ning]" as if pursued by police; coaches flying "like lightning"; wagons racing through Piccadilly at a "gallop"—which fueled a cognitive shift in public consciousness and its preferred aesthetics. The supposed result was a carnivalesque convergence of popular entertainments:

> The diversions of the times are not ill suited to the genius of this incongruous monster, called *the public*. Give it noise, confusion, glare, and glitter . . . —What are the amusements at Ranelagh? One half of the company are following at one another's tails, in an eternal circle; like so many blind asses in an olive-mill, where they can neither discourse, distinguish, nor be distinguished; while the other half are drinking hot water, under the denomination of tea, till nine or ten o'clock at night, to keep them awake for the rest of the evening. . . . Vauxhall is a composition of baubles, overcharged with paltry ornaments . . . an unnatural assemblage of objects, fantastically illuminated in broken masses; seemingly contrived to dazzle the eyes and divert the imagination of the vulgar—. . . . The walks, which nature seems to have intended for solitude, shade, and silence, are filled with crowds of noisy people, sucking up the nocturnal rheums of an aguish climate.[62]

Presented as the inevitable consequence of increasing distraction, popular diversions are rendered monstrous by the public's desire for ephemeral attention-get-



Jean-Baptiste Siméon Chardin, *Soap Bubbles* (1734). Erich Lessing / Art Resource, New York.

ters ("noise, confusion, glare, and glitter"). The supposed result: a widespread social and aesthetic confusion (audiences so overwhelmed they walk in circles on autopilot, unable to hear the bad music or to "discourse, distinguish, [or] be distinguished") and a set of disorganized, poorly crafted entertainments that crash against one another rather than forming a harmonious, unified aesthetic ("a composition of baubles," "paltry ornaments," and "an unnatural assembly of objects . . . contrived to dazzle the eyes and divert the imagination"). The "vulgar" public exhibitions of Vauxhaul and Ranelagh not only embody urban cacophony; they also mark the aesthetic grotesquery that Smollett believes to be its consequence. The public receives "art in a state of distraction."

Be it in a quiet schoolroom or in the midst of such hubbub, what one attended to was believed to have a deep impact on the mind. The things the mind was distracted from were equally important. The line between the two, as always, was razor thin. The intense absorption of the boy in Jean Chardin's *Soap Bubbles* (1739)—what Michael Fried defines as a "state or condition of rapt attention, of being completely occupied or engrossed"—already verges on the edge of distraction.[63] His focus is as fragile as the bubble he blows; in the seconds to follow, we know, it will pop.

Distraction, of course, is also a form of attention. Drawing the line between attention and distraction often hinged on the social object of focus: what was one attending to? Was it proper or improper, normative, or nonnormative? To read a sermon, a conduct book, or a famous—particularly a "morally improving" —literary work was, a priori, an act of attention. Reading novels, no matter how absorbing, was just as often codified as distraction. Distraction, in other words, is situational, determined by social and historical context as much as by a specific style of mind. James Hurdis's eulogy *The Village Curate* exemplifies this alignment of proper and improper reading with attention and distraction; the poetic speaker claims the muses nurtured his sister's reading from "attentive childhood's earliest hour," rendering her "Studious ever."[64] Yet it is only because her concentration is directed toward the didactic, not the frivolous, that eighteenth-century readers could recognize her absorption as focus: her eye "Delighted ever on the page to dwell / Of sweet instruction," that is, not pornography.[65] The latter, along with the "pestilent example[s]" of amatory fiction, are, for Hurdis, diversions from virtue. Steamy novels—particularly stories of female infidelity—"inflame" the mind, risking the overthrow of crucial cognitive hierarchies:

> The passions heated, reason strives in vain;
> Her empire's lost, and the distracted soul
> Becomes the sport of devils, wholly bent
> To turn and wind it in a world of sin.[66]

Wound in error, reason falls. No matter how avidly one reads *Memoirs of a Woman of Pleasure*, that is, the book is still a distraction.

The definition of attention also intersected with and reinforced social hierarchies: *who* was paying attention, to whom, and in what context? A lady studying a didactic work for the improvement of her mind might be seen as attentive (though this, of course, depended on one's view of women and learning); a servant girl sitting on the stairs lost in a novel was more likely to be seen as "distracted" from her work. This power dynamic extended to the term itself: "to attend," like its derivative "attendant," often referred to servants or other subordinates—someone who "attended" to, or focused on, a superior's needs. The first definition of "To ATTEND" in Johnson's *Dictionary* refers to an act of focus: "1. To regard; to fix the mind upon"; the second is "To wait on; to accompany as an inferiour."[67] A servant's focus was determined by his master's commands, but also by the need to remain in a constant state of vigilance, waiting on and noticing his or her every need. The pun behind Swift's satiric description of the distracted Laputans in *Gulliver's Travels* hinges on this double meaning. So focused on abstractions that they risk running into posts, these aristocrats employ "Flappers" to wait on their patrons, slapping their "mouths and ears"

with a pea-filled bladder to get their attention. Vigilance is delegated to the lower classes: "The Flapper is . . . employed diligently to attend his master." The servant assumes control over (and responsibility for) the master's executive functions, attending both to and for his employer. If hierarchies permeated the definition of attention, the advantages of rank and money also privileged the rich in terms of who could "afford" the luxury of admitting to distraction. The peerage and those of the upper echelon were granted more liberty to discuss—or even revel in—their minds' freedom to wander. In an 1817 letter, for example, Lord Byron glories in his inattention: "I have read [the poem you sent], but not with sufficient attention yet, for I ride about, and lounge, and ponder and—two or three other things; so that my reading is very desultory, and not so attentive as it used to be."[68] By contrast, when workers spoke of their reading in journals and diaries, they asserted the traditional virtues of unifocal attention, emphasizing the strength and diligence of their focus. Weaver and warehouseman Samuel Bamford claimed he "read" Homer's *Iliad* "with an absorbed attention which soon enabled me to commit nearly every line to memory."[69]

Distraction and social rank intersected in particularly complex ways around slavery and race in the eighteenth century. While the trope of the grateful, ever-attentive slave remained powerful, other proslavery works such as Edward Long's *History of Jamaica* increasingly racialized distraction. Specifically, Long suggested that "a want of due industry and attention" prevented the Jamaicans from managing their own land.[70] Linnaeus's four subcategories of race—*Homo sapiens americanus*, *asiaticus*, *africanus*, and *europeanus*—link not only complexions but cognitive predispositions to each group. Native Americans were "red, ill-tempered [and] obstinate," while Asians were sallow, avaricious, and melancholic (often interpreted as "easily distracted"). At this historical moment, Africans were characterized as being "black, relaxed, and negligent" as well as "ruled by caprice," or an all too fickle attention.[71] Still more fine-grained (and if possible, still more disturbing) racial categories emerge in James Grainger's georgic, *The Sugar-cane* (1764). Discussing the proper management of slave plantations, the poem separates slaves' cognitive capacities by region: the "docile mind[s]" of captives from Zaire, Grainger writes, are best suited for domestic service, while "the Papaws," or those from the western shoreline of Africa, are more suited to laborious focus:

> if the labours of the field demand
> Thy chief attention; and the ambrosial cane
> Thou long'st to see, with spiry frequence, shade
> Many an acre: planter, chuse the slave,
> Who sails from barren climes; where art alone,
> Offspring of rude necessity, compells

The sturdy native, or to plant the soil,
Or stem vast rivers for his daily food.[72]

African American writers like Phillis Wheatley resisted such stereotypes, using the trope of distraction to forge a subtle and powerful critique of both attention and slavery. Her poem "On Imagination" praises flights of fancy, the roamings of a supposedly idle mind that, in fact, allow one's thoughts to "range . . . the realms above" as "from star to star the mental optics rove":

Now here, now there, the roving *Fancy* flies,
Till some lov'd object strikes his wand'ring eyes,
Whose silken fetters all the senses bind,
And soft captivity involves the mind.[73]

Tying the "soft captivity" and "silken fetters" of focus to verbs that evoke bondage and punishment ("bind," "strikes," "flies"), Wheatley embeds the language of enslavement within her poem. As attention becomes an intricate metaphor to critique the racial systems—specifically the slave trade—that sought to circumscribe and chain the African body and mind, distraction comes to symbolize freedom.

These cognitive hierarchies of rank and race in attention theory become still further complicated when imbricated in—and linked to—Enlightenment systems of gender. Women, in general, were believed to be unusually distraction prone. Though Eliza Haywood will later turn this stereotype on its head, *The Female Spectator* suggests that women, "by the Texture of the Brain, . . . are less capable of deep Meditations" because they have a "Multiplicity of volatile Ideas, which, continually wandering, naturally prevent our fixing on any one Thing."[74] Asked to give a sermon at the Asylum for Female Orphans in 1768, Thomas Francklin exhorted the wards to remember this gendered vulnerability for the good of their souls: "The female mind is formed in a soft and tender mold, peculiarly susceptible of impressions, and as remarkably tenacious of them: how much then doth it import their future happiness, that the first which they receive shou'd be fair and good, and that to keep the waters from corruption, they should be sweet and untainted at the fountain!"[75] Many early feminists fought this stereotype of the female mind. Much of the rhetorical force behind Mary Wollstonecraft's *A Vindication of the Rights of Woman* relies on the idea that cognitive habits of inferiority—particularly habits of focus—were taught: "Men have various employments and pursuits which engage their attention . . . but women, confined to one, and having their thoughts constantly directed to the most insignificant part of themselves, seldom extend their views."[76] Freed from these constraints, their minds (and powers of concentration) would expand. Still, women, particularly those without the rank and privilege to afford otherwise, routinely found themselves surrounded by clamor: a barrage of chil-

dren, household duties, and social responsibilities. As one Elizabeth Wynne complained to her journal in 1792, she "did not hear much of the sermon . . . for whilst it was being read the children made such a noise and Made. de B. whilst embroidering her waistcoat never stopped talking to the Abbe . . . that I was distracted and could not pay the least attention to the sermon."[77] Not until George Eliot will we find a woman writer in open acceptance—much less Byronesque celebration—of a scattered mind. In an 1839 letter to her mentor, Maria Lewis, she describes the distractions of her "unsettled . . . life," despite its chaos, as producing a kaleidoscopic mixture of materials for her to draw on for her writing:

> [M]y mind, never of the most highly organized genus . . . is like a stratum of conglomerated fragments that shews here a jaw and rib of some ponderous quadruped, there a delicate alto-relievo of some fernlike plant, tiny shells, and mysterious nondescripts, encrusted and united with some unvaried and uninteresting but useful stone. [It] presents . . . an assemblage of disjointed specimens of history, ancient and modern, scraps of poetry picked up from Shakespeare, Cowper, Wordsworth, and Milton, newspaper topics, morsels of Addison and Bacon, Latin verbs, geometry entomology and chemistry, reviews and metaphysics, all [captured] . . . by the fast thickening every day accession of actual events.[78]

A Swiftly Tilting Madness

Eliot's description of her mind as a collection of "disjointed specimens" provides an apt metaphor for distraction's intricate, seemingly disjointed history. Eighteenth-century definitions reflect a patchwork history, a rich assemblage—"a stratum of conglomerated fragments"—drawn from literature and history, chemistry and math, intermixed in turn with philosophical treatises, journals and diaries, and everyday discussions of distraction's role in the life of the mind. This book uses cognitive science as a thread to interweave the history of mental states, the history of science, and the history of literary form, working toward a methodology and interdisciplinary criticism able to embrace this cultural and linguistic bricolage while also revealing transhistorical fragments and patterns. This suturing marks an opening up of the field to reveal connections that would otherwise go unseen: links between eighteenth-century optics and attention theory; connections between the artistic depiction of auditory distraction in Hogarth's *Enraged Musician* and paradigms of environment-based cognition; lines that yoke together the pedagogy of reading with conduct-book advice on female sexual vigilance. As Barthes notes in *From Work to Text*, interdisciplinary work inherently stretches the boundaries—conceptual, methodological, rhetorical—of each intersecting discipline to the point of discomfort, even the very brink of fracturing:

> What is new . . . comes not necessarily from the internal recasting of each of these disciplines, but rather from their encounter in relation to an object which traditionally is the province of none of them. It is indeed as though the *interdisciplinarity* which is today held up as a prime value in research cannot be accomplished by the simple confrontation of specialist branches of knowledge. Interdisciplinarity is not the calm of an easy security; it begins *effectively* (as opposed to the mere expression of a pious wish) when the solidarity of the old disciplines breaks down—perhaps even violently, via the jolts of fashion—in the interests of a new object and a new language neither of which has a place in the field of the sciences that were to be brought peacefully together, this unease in classification being precisely the point from which it is possible to diagnose a certain mutation.[79]

This book is no exception. It emerges from the belief that the breakdowns at the intersections of disciplinary fields (and the confrontations that surface in finding a new language for the history of cognition) capture a productive dissonance with the power to reveal a new object of study. The heterogeneous quality of eighteenth-century and contemporary descriptions of distraction—and the tendency of disciplinary meanings to interpenetrate, mingle, collapse, and divide—guides my work throughout this book. Rather than offering a teleological account of distraction's evolution across the century or a positivistic account of neuroscientific discovery, I investigate the multiple, overlapping constellations of meaning that emerged amid Enlightenment debates over attention to map fluctuating historical conceptions of focus and an unease of classification that shapes (and haunts) attention studies today. This is not a model of what E. O. Wilson would call "consilience" between the humanities and sciences, but an intellectual history that grows out of its jolts, its confrontations, the violence of fields brought unexpectedly together.

This book brings together a series of key conversations in literary studies, as well as fields that rarely speak, including the history of mind, cognitive approaches to literature, and studies of reading and the eighteenth-century novel. As one of my methodological goals is to start broader conversations between cognitive scientists, historians, and literary critics, writing this book has meant entering new rhetorical territory to engage scholars accustomed to speaking in their own specialized discourses. This act of translation, not simply at the level of methodology, but at the level of style, jargon, and conventions of academic publication, has been the most exciting part of this work. We often speak, colloquially, of bridging the supposedly unbridgeable gap between humanities and sciences. More rarely do we consider the pragmatic details of how one might write something meant for an authentically interdisciplinary audience, one that here includes literary scholars and neuroscientists, eighteenth-century historians and digital humanists, etc. Finding ways to translate concepts across fields—

explaining changes in eighteenth-century printing practices to a psychologist, or a concept like cross-modal attention to literary scholars—and carving out generic space for such work is one of its central contributions to interdisciplinary scholarship. Readers from multiple disciplines will find themselves encountering a strange mixture of the familiar and the new, comfortable in moments that fit their specialty, stretched (even potentially disconcerted) by the sudden entrance of another discourse, and challenged by transitions between them. Ideally, these moments will be generative, both conceptually and—perhaps more important—stylistically, accustoming each group in small doses to the (often tacit and radically disparate) codes of writing and argumentation in the humanities and sciences.

Much recent scholarship in cognitive science and literature has focused on transhistorical literary trends in fiction's engagements with the mind; this book, by contrast, traces the history of neuroscientific ideas about attention and reveals their roots in Enlightenment literature, philosophy, and culture. From this analysis emerges a vision of the crucial relationship between literature and the science of mind that underscores the powerful role artistic expressions of fictional thought played in advancing and complicating contemporary views of cognition. As Crary notes, "the ways in which we intently listen to, look at, or concentrate on anything have a deeply historical character."[80] I argue that they are also deeply cognitive; history and cognition are inextricably intertwined. Moving between eighteenth-century theories of attention and modern neuroscience allows me to distinguish between distinct cognitive types of distraction —such as mind wandering, scattered focus, divided attention, and selective blindness—as these categories emerge to offer a more complex account of distraction's literary history.

One of the most important debates in cognitive literary studies revolves around the idea of "cognitive historicism." "Always historicize!" Lisa Zunshine urges in *Why We Read Fiction*, citing Frederick Jameson.[81] Yet when, where, and how to do so remains an open question. One group of cognitive literary theorists, such as Zunshine, Blakey Vermeule, and Mark Turner, trace cognitive literary patterns across multiple historical periods;[82] a second group, including Alan Richardson, Suzanne Keen, and Angus Fletcher, have sought to increase the historical specificity of cognitive criticism by narrowing their focus to a specific period and genre: the neural sublime in Romantic poetry, empathy in the nineteenth-century novel, the cultivation of a pragmatic cognitive ethics in Renaissance tragedy.[83] In both cases, critics often seek to ground their cognitive insights by returning to robust historical examples from their period; yet the challenge of explaining unfamiliar cognitive concepts within a limited space—be it that of a book, article, or review—has kept most scholarship from being able to integrate, much less balance, cognitive literary studies with the

history of mind and brain.[84] Distraction attempts to productively combine the two, thus building on (and offering new directions for) scholarship in cognitive literary studies. Instead of presuming the historical applicability of modern neuroscientific studies, I work to maintain a difficult balance: to show how and when our contemporary studies have, in fact, been shaped by presumptions and questions about attention and cognition grounded in literature of the Enlightenment while also acknowledging that certain brain functions may remain more stable over time, influencing the act of reading.

By focusing on the history of distraction, this book's contribution to cognitive historicism lies in its emphasis on creating increased reciprocity between neuroscience and literary history. In prioritizing the eighteenth century, however, I do not dismiss modern cognitive research as a mere historical construction. Instead, I ask readers to hold a number of critically uncomfortable questions in mind—and to hold them in productive dissonance—without offering simple answers: How (and how much) does historical environment influence mind, brain, and cognition? In what cases could patterns of cognition remain stable over time, and in which cases would they be more likely to shift? When might cultural theories about a state of mind influence our cognitive experience of it, and thus its neural bases?

Attention is a particularly valuable place to begin asking these questions about historical malleability because it is a cognitive phenomenon whose very purpose is to link the mind to the surrounding world. Habits of concentration, modern research on neural plasticity suggests, are not exclusively hardwired; they are also formed through repeated interactions with the environment (i.e., they are learned). The brain, that is, is capable of generating new neural connections, as well as new growth, new cerebral tissue, and new myelination. (Plasticity, or "the collective mechanisms underlying brain adaptability," neuroscientist Ira Black notes, "emerges at multiple levels of the neuraxis," which includes "the genesis of new neurons and glia throughout life.")[85] What we pay attention to —or don't, as the case may be—has a strong influence on what our minds notice, focus on, and remember in the future. As the saying goes, neurons that fire together wire together. Even a purely neuroscientific approach appreciates this flexibility. While robust studies certainly suggest focus has clear cognitive limits (i.e., it cannot be infinitely sustained, and we cannot focus on an infinite number of tasks), the brain regions associated with attentional control are also unusually environmentally sensitive.[86] As scientist L. D. Selemon explains, one of the main regions associated with attention—the prefrontal cortex—is "the last brain region to mature," with "adolescent brain maturation . . . characterized by the emergence of executive function," or higher-order attentional networks.[87] Unlike the brain's visual systems for reading, which develop early and thus are more likely to remain stable in various cultures and contexts, the environmen-

tal stimuli affecting attention continue to shape the brain—and at the level of structure, not just neural connections—well into our teenage years.[88]

Perhaps most important, attention's and distraction's changing Enlightenment meanings return us to the final methodological question this book raises for cognitive literary studies: can changing historical beliefs about a state of mind affect individual cognitive experience and thus the neural patterns produced by that mental state? In their history of curiosity and wonder, for example, Lorraine Daston and Katharine Park note that classical and early modern writers revered wonder and praised it as the key to philosophical inquiry, degrading curiosity as a form of "lust and pride." This cognitive hierarchy flipped in the eighteenth century; Enlightenment writers began to cast curiosity as the spur of scientific advancement, while wonder "migrated . . . [to the pole] of dull stupor."[89] In such moments of shifting meaning, Daston and Park argue, not only the definition but the subjective experience of these mental states changes: "Early modern curiosity was not simply Augustinian curiosity with a reversed moral charge; its emotional texture had also been altered."[90] With the acknowledgment that emotional texture can be altered comes a corollary set of questions about how cultural attitudes about a mind state might influence the neural pathways activated by the mind state itself; curiosity as lust, that is, may be neurochemically distinct from curiosity as virtue.[91]

If as Daston and Park argue in *Wonders and the Origin of Nature*, "the felt substance of an emotion depends to a significant degree on the company it keeps," distraction and attention present a particularly interesting case.[92] Not only did definitions of these terms compete, shift, and realign over the course of the eighteenth century, terms like *attention* and *distraction* were linked to a range of other mental states—curiosity, boredom, wonder, objectivity—often themselves in flux.[93] Distraction, by itself, already worked within a complex semantic field that includes terms such as *absorption*, *focus*, and *concentration*, as well as *inattention*, *absentmindedness*, *scatterbrained*, and *disorganized*; it tapped ideas not only of madness but of boredom and idleness, the eccentric, as well as aesthetic categories associated with literature and luxury such as diversion and digression. As new ways of describing (and categorizing) distraction emerged in the collective imagination of the eighteenth century, the "range" of distracted experience expanded as well. Not only could distraction be considered a neutral state, it could also be a valuable mode of mind, explicitly tied to creativity. Ideas about a state of mind—in our case, eighteenth-century theories of attention—influence emotion, and thus cognition.

Categorizing Distraction

Attention is no mere umbrella concept but describes a wide variety of cognitive states, each of which has its own distinctive history.[94] Rather than abandoning

the term as a mere placeholder, this book digs into and takes up these types of attention, tracing the unique history of each—indeed, their emergence *as* categories. While William James claimed attention to be the natural "opposite" of "the scatterbrained state [known as] *distraction*," this book reveals a shifting series of relationships between distraction and attention.[95] No mere binaries, attention and distraction often interpenetrate and shift in tandem, producing not so much paradigm shift as a kaleidoscopic set of evolving contrasts. As cognitive neuroscientist Raja Parasuraman notes, "attention is not a single entity but the name given to a finite set of brain processes that can interact, mutually and with other brain processes, in the performance of different perceptual, cognitive, and motor tasks."[96] Divided attention becomes useful, not distracting, in situations that require multitasking, as when a chef orchestrates a kitchen preparing a five-course meal. Similarly, selective attention to a conversation while walking along a road in London swiftly becomes distraction if one of the conversationalists is hit, while listening, by a freewheeling stagecoach. Our interpretation of the relationship between distraction and attention changes based on social context, the individuals involved, and the objects that attract focus, as well as whether that attention (or distraction) is internal or external, and whether it is visual, auditory, tactile, or a combination of these. Our goal as literary scholars, historians of mind, and cognitive scientists in this case, is then to recognize what Parasuraman calls "the multifaceted nature of attention" and "attempt to meet the challenge of understanding the similarities and differences between the varieties of attention."[97]

There are as many kinds of distraction as there are kinds of attention; each deserves its own space. To illustrate this complexity, each of my chapters explores the history of a different type of distraction and links it with a relevant work of eighteenth-century literature and an aspect of narrative form. Each chapter also identifies and contextualizes a particular type of distracted character and the state of mind they serve to represent (or lampoon, as the case may be). As de La Bruyère notes of his caricature of distraction in Menalcas, this book serves less as "a portrait of one individual, [than] a collection of anecdotes of absent-minded persons."[98] I begin with the literary history of "attention span," or, in the eighteenth century, "wandering attention"—that is, the length of time the mind can sustain focus before drifting off task. Chapter 1 focuses on the conceit of mind wandering in the essay genre, particularly Samuel Johnson's development of a distracted authorial voice in the *Rambler* (1750–52) and *Idler* (1758–60), to attract (and reform) inattentive readers. Setting Johnson's essays within a tradition that stretches back to Michel de Montaigne and forward to Charles Lamb, I propose that the century's changing theories about how to control the wandering, drifting mind inspired authors to experiment with the brief, flexible essay form to manage the short attention spans of their imagined

audience. I place these attempts to cultivate better habits of focus in the context of larger discussions about methods for organizing the distracted mind—from eighteenth-century poetry to pedagogy and philosophy—and show how these participated in key conversations about sustained attention and cognitive patterns of reading. While Johnson's distracted figures sought to imitate—and then mock—readers' quick-shifting focus to encourage better habits of concentration, Romantic essayists later intertwined distraction with the claim to originality and genius, refiguring the wandering mind as both the essay writer's and the essay reader's most valued trait.

Chapter 2 turns to eighteenth-century constructions of situational awareness and cognitive overload. Focusing on a set of coquettish, quixotic heroines from the 1750s, I investigate "lapses of concentration": moments when we focus on the wrong thing at the wrong time and neglect key environmental cues. Here, my central case is Eliza Haywood's *The History of Betsy Thoughtless* (1751), whose flighty heroine frequently fails to notice her many suitors' sexual advances. Reading such representations of environmental distraction and overload alongside other examples of female obliviousness to sexual danger from Hogarth's *The Harlot's Progress* (1732) to John Cleland's *Memoirs of a Woman of Pleasure* (1748–49), I show how the larger gendering of the distracted mind in the Enlightenment allowed authors to rethink attention by emphasizing the complexity of situational awareness and the multiple avenues through which it could lapse, or slip. The challenges of representing the unfocused minds of such heroines, moreover, motivated key experiments for managing unreliable point of view, prompting the development of new literary architectures for indulging rather than reforming flighty, or intermittently focused, readers.

My third chapter takes up the cultural imagination of "scattered attention"—a distracted cognitive rhythm in which the mind skips haphazardly among objects, embracing many and abandoning them just as quickly—and its translation into a narrative style. Centering on Laurence Sterne's *Tristram Shandy*, I suggest that the attempt to capture the distracted mind's restless movements in prose were a central springboard for his narrative's famous improvisations on the traditional tempo, punctuation, and rhythm of the novel. If writers like Haywood had begun to indulge inattentive audiences, Sterne purposefully overloads his readers to invite scattered focus. His novel, I suggest, embodies the period's rising celebration of distraction as an excellent quality of mind, imagining that the cognitive tangles of multiobject attention will allow unexpected ideas to collide and thus produce new thought.

Chapter 4 switches from "scattered attention" and the challenges of multiple stimuli to "fixated attention," a cognitive concept describing moments when compulsion locks our attention on just one thing and blinds us to all else. Reading William Godwin's *Caleb Williams* (1794) and Charles Brockden

Brown's *Edgar Huntly* (1799) alongside critiques of unifocal attention from the philosophical to the pornographic, I explore how the eighteenth-century Gothic combined ideas about obsessive concentration and selective blindness to participate in a broader pathologization of narrow focus in the 1790s. My goal is to illuminate the development of ideas about *l'idée fixe* as a form of distraction, its aesthetic relationship to the Gothic sublime and structures of suspense, and the larger devaluation of single-minded focus that occurred in the wake of Diderot's *Encyclopédie*, which set distraction opposite the "stupor of attention" which merely (and involuntarily) "rested on the same idea."[99]

Finally, I turn to Jane Austen, arguing that her literary uses of "divided attention"—or multitasking—reshape *characterization* in the nineteenth-century novel. Her novels divide characters according to their ability to attend to many things simultaneously. In *Pride and Prejudice*, for example, Austen surrounds the more cognitively sophisticated Elizabeth Bennet with usefully inattentive characters like Lydia and Miss Bingley as well as with obnoxiously attentive figures like Mary and Lady Catherine. Her novels thus turn multitasking into a tool for building psychological depth, elevating characters who perform many activities at once—playing piano while holding an interesting conversation or doing needlework while still observing their social surroundings—over minor figures who (often) can focus on only one thing at a time. Reading Austen's novels alongside works of philosophy, political treatises, and conduct manuals offers a crucial window into the history of a category of attention now central to modern neuroscience: divided attention, a subfield that includes multitasking, cross-modal (i.e., multisensory) perception, and cognitive priority, or adaptive gating (the ability to focus on the most relevant information in a larger set). Yet Austen also emphasizes something that our studies today often ignore. As multifocal attention becomes a measure of character in her novels, distraction also becomes a narrative device for conveying mental flexibility and cognitive richness.

This book traces the effects of this inclusion of multifocal theories of attention alongside—and in competition with—the unifocal and the ensuing association of distraction with intellectual vibrancy. It offers a deeper understanding of how the long eighteenth century imagined mental life; at the same time, it looks forward, providing a history essential for understanding our perception of modernity as an age of distraction, our nostalgia for readings of attention as a sign of moral value, and the slow reconceptualization of distraction not merely as disability but as creative capacity. Rather than replacing one another, moreover, competing eighteenth-century paradigms of focus are sustained in constant, generative friction. My conclusion explores how these collisions between traditional and modern views of focus in the Enlightenment are replayed—and reshaped—as they extend through Romanticism and nineteenth-century psychology into modern cognitive science.

Mind Wandering

Forms of Distraction in the Eighteenth-Century Essay

In 1751, Benjamin Franklin published *Idea of the English School*, which argued that the best way to teach children to focus was to have them study essays. Once students mastered the basics of reading and writing, the next goal was "Reading with Attention." The ideal syllabus here assigned "[s]ome short Pieces, not exceeding the Length of a *Spectator*, to be given this Class as Lessons. . . . Let it then be required of them to give an Account, first of the Parts of Speech, and Construction of one or two Sentences; . . . [next, a summary of the essay's argument, and finally] the Meaning of each Sentence, and of every uncommon Word. This would early acquaint them with the Meaning and Force of Words, and give them that most necessary Habit of Reading with Attention."[1] Periodical essays become the centerpiece of a lesson plan to train students in the art of focus. Implicitly valued for their moral and literary merits, Addison and Steele's *Spectator*s are explicitly valuable as a unit of length, one that teachers should "not exceed"; they are powerful tools of attention because they are short. Children learn to concentrate while reading not because the essays absorb them but because it is possible to reach the end quickly and still have time to select key passages, look up vocabulary, diagram sentences, and analyze rhetoric. Even so, Franklin recommends students take a break in between: a first read, a good night's sleep, return again in the morning.

Such discussions about how to train attention in children—and the ideal

genres and practices for cultivating it—joined a larger eighteenth-century debate about how to reform the wandering mind. "There is nothing of more Use to the Mind," writes John Clarke in *An Essay on Study* (1731), "than to be able to fix its *Attention* steddily upon [an] Object."[2] Though sites for the debate ran the gamut from rhetorical theory to advice for training mules, from satiric poetry to the popular essay, most agreed attention spans were getting shorter. While in 1694, Addison could write of Milton that "ev'ry verse . . . my whole attention draws,"[3] by 1782 William Cowper resignedly declared such "habits of close attention . . . more rare."[4] Pedagogical theorist Isaac Watts advised readers: "Don't apply yourself to any one Study at one time longer than the Mind is capable of giving a close Attention to it without weariness or wandring . . . lest the Mind be seiz'd with a Lassitude."[5] This advice on avoiding cognitive strain, astute as it was, skimmed two of the century's questions about sustained concentration: how long could "close Attention" be given before the mind wandered? Could certain educational methods, rhetorical techniques, or genres make this period any longer?

The essay, theorized by critics from Adorno to Lukács as the epitome of spontaneous thought, open-ended questioning, and free "play," at first seems a strange place to discover how to govern the undirected mind.[6] Johnson's *Dictionary* defines the essay as a genre of wandering: "a loose sally of the mind; an irregular, undigested piece."[7] Earlier in the century, Ephraim Chambers praised the informal essay's style for its ability to model natural digressions of thought: to be written "much . . . in the Manner a Man thinks; sometimes leaving the Subject, and then returning again, as the Thoughts happen to arise in the Mind."[8] Yet the centrality of mental wandering to the personal essay, seemingly the ideal genre for speculative excursion and half-finished thought, established the form as a touchstone for eighteenth-century discussions about training attention. To illuminate this dissonance, we look to Johnson's *Rambler* (1750–52) and *Idler* (1758–60), two essay series that capitalized on the increasingly fashionable subject of distraction by turning wandering attention into the central characteristic of their authorial personae and narrative voice. Rather than condoning the distraction they advertise, however, his periodical essays use the short, serial genre to attract readers with limited attention spans in order to exhort audiences not to indulge their wandering minds.

Johnson's description of the essay as a "loose sally of the mind" invokes a type of distraction known as *wandering attention*, when focus drifts away from one thing and off to another. Cognitive scientists today call this kind of distraction *mind wandering*, or "task-unrelated thought," using the term to discuss instances "when attention shifts away from the primary task without conscious intent."[9] To trace eighteenth-century theories of the wandering mind requires turning to a moment when the volitional nature of distraction was still radically in question. Mapping the concept's history involves engaging two bodies

of research in modern attention studies: work on *sustained attention*, a form of voluntary cognitive control that allows us to maintain focus for an extended time period, and experiments on *mind wandering*, or how often the mind drifts to thoughts unrelated to the task at hand, often invoked in the popular press to talk about attention span. Now entire (often entirely separate) subfields in neuroscience, these two ideas were tightly connected in the Enlightenment; eighteenth-century descriptions of sustained attention often invoked the effort of maintaining voluntary concentration alongside distraction's frequency and periodicity. Mind wandering thus served as a contact point for eighteenth-century theorists often at odds: those interested in how to train, extend, and direct focus and those interested in the natural pacing, or rhythms, of distraction.

Though the cognitive term *mind wandering* may be newly minted, the concept is not.[10] Neuroscience's recent turn to the idiom of wandering to discuss moments of distracted daydreaming marks a return to an Enlightenment metaphorics of attention. Unlike reverie, which revolves around the metaphor of the dream, wandering attention posits a point of concentration from which it is possible to deviate. Its ruling metaphor is the line. Digressions from an ideal attention could be concretely represented both in space and in time, either as a habit of wandering off point or as a fleetingly brief (i.e., unfinished) period of concentration. Wandering thoughts could be described either as a failure of cognitive control—a drifting from task that connotes a loose rein on one's thought—or as part of attention's temporal limits, a natural cap on the duration of focus: what we would today call attention span. The latter was increasingly recast by eighteenth-century attention theorists as part of the normal ebb and flow of the mind, a break potentially necessary to its health.

The eighteenth century thus sustained two competing visions of wandering focus: an early modern model of devotional attention in which wandering was a sin, and a more secular paradigm that incorporated distraction within the patterns of everyday cognitive life. Westminster Abbey's approved manual for teaching Christianity, *The Shorter Catechism Explained* (1727) answered the question "What is requisite for joining in prayer in a right manner?" with "Close attention without wandering."[11] Richard Allestree's popular handbook *The Whole Duty of Man* urged readers to pray to God for focus: "O gracious Lord God, may I come before you with such . . . a fixedness and attention of mind, as no wandering thoughts may interrupt: that I may no more . . . have my Prayers turned into sin."[12] Such condemnations clashed with rising descriptions of distraction as an ordinary, even intellectually redeemable state of mind. Despite his praises of attention elsewhere, René Descartes reveals in his *Meditations on First Philosophy* (1641) that his "mind enjoys wandering off and will not . . . submit to being restrained."[13] Still more tolerant views of mind wandering grew in tandem with the midcentury revival of Epicurean theories that described thought in constant

motion. Amid such cognitive flurry, distraction was not only inevitable but also potentially productive. By 1782, Jean-Jacques Rousseau's *Confessions* resists the glorification of "close attention without wandering" by reviving a peripatetic tradition that celebrated his mind's ability to roam with his feet.[14] "There is something about walking," he declares, "which stimulates and enlivens my thoughts. When I stay in one place, I can hardly think at all, my body has to be on the move to set my mind going."[15] For Rousseau, the wandering mind is more mobile, more alive, and thus more able to generate novel thought.

Obvious points of conflict emerge between these two visions of attention. In one, a wandering mind is a sinful habit to be constrained for the sake of the soul's redemption. In the other, distraction is the natural consequence of mental restlessness and a prod to spontaneity. Johnson's essays, which employ the conceit of rambling, idling characters to mask a moral message of attention, mark a key moment of friction and synthesis in the history of distraction. More broadly, Johnson's satirical rejection of distraction allows us to appreciate its subsequent celebration in the novels of Eliza Haywood, Laurence Sterne, William Godwin, and Jane Austen. To peel back the layers of rhetorical innovation, pedagogical sophistication, and formal experimentation in the *Rambler* and *Idler*, moreover, is to find a literary work—indeed, a genre—reformed in order to negotiate the century's competing theories of wandering, an aesthetic and theoretical hybrid that sought to harness carefully acknowledged distraction to sustain concentration. Narratives of distraction, with all the ideological saturation of language, take on the power Mikhail Bakhtin ascribes to "artistic representation" and thereby allow us to excavate ideas about focus with historical and aesthetic richness: "The living utterance, having taken meaning and shape at a particular historical moment in a socially specific environment, cannot fail to brush up against thousands of living dialogic threads, woven by socio-ideological consciousness around the given object of an utterance; it cannot fail to become an active participant in social dialogue."[16] Descriptions of mind wandering in Johnson's essays, moreover, "brush up against" (and illuminate) an intricate bundle of socio-ideological threads that will intersect to produce the core cognitive metaphors and frameworks that form our modern concept of *attention span*. What we now define as a natural cap on "the length of time a person can attend continuously to one type of stimulus (as a single subject, activity, etc.)" or the measure of an individual's "capacity for sustained concentration" in fact grows out of theories that tended to emphasize the immense voluntary effort and work it took to stretch the mind toward an object and sustain focus.[17]

Distraction and the Eighteenth-Century Essay

As early as 1580, Michel de Montaigne claimed the essay as the perfect narrative form for the rambling mind: "a field . . . wherein so long as there is either inke

or paper . . . I may uncessantly wander and fly without encombrance."[18] Johnson's essays shared much with their predecessors, from Montaigne's *Essais* to the periodicals of Addison and Steele; however, his are the first to explicitly align the essay—particularly his personae—with distraction, an aesthetic choice that rendered the genre's strong but implicit associations with wandering absolutely transparent. A predisposition to cognitive drift defines the imagined writers of both of his famous essay series, the *Rambler* and the *Idler*, saturating their works down to their titles.[19] The Rambler, we learn, seizes on essay writing because he has difficulty focusing attention for longer work. Marked by a tendency to wander, he roams the streets of London "storing up thought" for "mental meanderings,"[20] a habit mirrored in his writing. He lets his thoughts roam until the last minute: "I sat yesterday morning employed in deliberating on which, among the various subjects that occurred to my imagination, I should bestow the paper of to-day. After a short effort of meditation by which nothing was determined, I grew ever more irresolute, my ideas wandered from the first intention, and I rather wished to think, than thought, upon any settled subject; till at last I was awakened . . . by a summons from the press."[21] In this classic description of the writer's battle between wandering thought and directed focus, the tendency to drift into distraction becomes a form of cognitive entanglement. Work hides chronic procrastination. Accustomed to "short efforts" of thought and a mind that refuses to "settle" on a topic, the essayist's rambling dramatizes the central challenge of stimulus-driven concentration. Unable to internally motivate—or consciously direct—focus, he can only be roused by necessity: the immediate call for words on the page.

Yet the Rambler abandons his conceit of wandering with a swiftness that matches his readers' supposedly short attention spans. Between the Tuesday of his opening piece and the following Saturday—an interval of four days—the pose of indulged wandering is dropped to criticize the foolhardiness of authors who roam without strict attention amid abstractions, failing to consider whether they are guiding readers toward moral truth. Focus, for Johnson, signifies steadiness and piety; distraction connotes errant wandering. In his *Dictionary*, we find, surrounding "rambling," an associative pattern that begins with roving, moves through deviation and error, and ends with sin:

> To RAMBLE. *v.n.* To *rove* loosely and irregularly.
>
> To ROVE. *v.n.* To ramble; to range; to *wander*.
>
> To WANDER. *v.n.* To rove; to ramble here and there; to go, without any certain course. . . . To deviate; *to go astray*.
>
> To STRAY. *v.n.* To wander; to rove. . . . To rove out of the way; to range beyond proper limits. . . . T*o err*.

> To ERR. *v.n.* To wander; to ramble. . . . To miss the right way; to stray. . . . To deviate from any purpose. . . . To commit *errours*
>
> ERROUR. *n.f.* Mistake; involuntary deviation from truth. . . . A blunder; . . . Roving excursion; irregular course. . . . [In theology.] *Sin.*[22]

The *Idler* works through a different set of mind-wandering problems—here, an inability to stay on task—through a second idiom that drew on idleness's historical associations with *acedia* (the sin of being "without care") and its connections to sloth. In the *Idler* essays, the central character's lack of drive produces not so much a wandering mind as a comically short attention span; his concentration is so bad that "if his *Title*" (that is, the Idler) "had required any search, he never would have found it."[23] Rather than considering future topics, the Idler's concentration drifts before he can think further than his pseudonym: "What is to be expected from this Paper," he admits, "it is hoped that no Reader will enquire."[24] If the Rambler figures the distracted writer, the Idler figures the distracted reader, his limited focus prohibiting lengthy perusals. Intentionally playing on the cultural specter of unmotivated body and mind, Johnson's persona uses the word's roots in the Latin *vanus* ("empty, or void") to invoke the popular eighteenth-century idea that sustained attention without wandering required effort. Thus Johnson's *Dictionary*: "IDLY: Carelessly; without attention."[25] The *Rambler* was against wandering, and the *Idler* encouraged active attention; a roaming mind (like idle hands) hazards spiritual danger.[26] The formal experiment of his essays—and their central moral-aesthetic challenge—was to develop a set of rhetorical tools and characters that could simultaneously lure diverted readers and teach them to "walk with . . . steadiness in the right path" of attention and piety—that is, to use the conceit of distraction to train the focus needed to come before God.[27]

Critics have tended to look to Johnson's biography—his vexed relationship to attention, his history as a walker, his habitual procrastination—to explain what looks a mistake, or simply a hastily made choice, of title for his first series. Johnson's only recorded comment on his choice of persona, or *eidolon*, in the *Rambler* remains cryptic: "I was at a loss how to name it, and resolved that I would not go to sleep till I had fixed its title. . . . The Rambler seemed the best that occurred, and I took it." We thus find his biographer, Walter Jackson Bate, like so many, puzzled: "As Johnson also intended the work as a serious moral effort . . . the name of the Rambler has always seemed a little strange."[28] The discrepancy between advertisement and message in the *Rambler* and *Idler* drew wry comments from eighteenth-century readers. "The Rambler . . . is certainly a strong misnomer," joked Lady Mary Wortley Montagu: "he always plods in the beaten road of his predecessors, following the Spectator (with the same pace a pack-horse would do a hunter) in the style that is proper to lengthen a

paper."[29] Horace Walpole quipped that the Rambler's refusal to "wander" from a moral message made him repeat himself, dealing "so much in triple tautology, or the fault of repeating the same sense in three different phrases, that I believe it would be possible . . . to make one of his Ramblers into three different papers, that should all have exactly the same purport and meaning, but in different phrases."[30]

Yet if we take seriously the idea that the distracted character served not only as an excuse for training attention but also as a satire on the essay's long-standing association with wandering, new literary-historical subtleties emerge. A strong precedent existed in the essay tradition for thinking of a "Rambler" as both a physical and mental wanderer. Addison's *Spectator* (1709–11) papers grow out of his "late Rambles, or rather Speculations," a phrase that purposefully links the pedestrian and the cognitive.[31] Sir Richard Blackmore's *The Lay-Monk* (1713) uses the term to describe an absentminded character whose mind wanders with his feet: a man who "is not only a frequent *Rambler* abroad, but is very apt to slip away from us in his thoughts, while he is sitting among us . . . [a trait] that looks like Forgetfulness, yet only proceeds from *Inattention or Impatience of thinking long in a Train.*"[32] Wanderlust—the inability to stay long in one place—begets a mind similarly prone to go "abroad," straying from topic to topic. For Johnson, what could provide a better cover for attentional training than an essay series framed around distraction, filled with readers commenting on the piece's inability to hold their focus?

We often think of the eighteenth century as the age of the long novel, but it was also the age of the short periodical essay. Reading material available to audiences may have been growing, but readers' ability to focus on such material was considered increasingly taxed. Though historians of the book reveal a more complex story regarding the number of works circulating in eighteenth-century England, with dynamic peaks and valleys, authors believed they were facing a steep rise in competition. And while Franklin's journal may have recommended short essays as the ideal form for teaching attention, periodical writers expressed a sense of intense vulnerability to readers' distraction. Thus the tone of concern in Addison's famous essay series on wit; the *Spectator* announces his intent to extend his topic beyond that day's pages: "I intend to lay aside a whole Week . . . that the Scheme of my Thoughts may not be broken and interrupted; and I dare promise my self, if my Readers will give me a Week's Attention, that this great City will be very much changed for the better by next *Saturday* Night."[33] A *Spectator* paper was short enough to fit a folio half sheet, approximately 12¼ inches high and 8 inches wide: only twenty-five hundred words long on average. Yet to discuss "a week's attention" was to enter the realm of the hypothetical, with focus on a radical "if." One of the ongoing jokes of the *Rambler* and *Idler* is that no one reads them, at least not fully. Faced with good but regret-

tably dense moral prose, Johnson thought most audiences had attention spans about as long as the readers mentioned in his *Rambler* no. 16, who "looked into the first pages, but were hindered, by their admiration, from reading farther."[34]

Actual readers admitted to this partial perusal. As a letter from Samuel Richardson of 1750 makes clear, one could buy periodical essays—and claim to enjoy and judge them—without ever fully reading them: "I have constantly been a purchaser of the Ramblers from the first five that you were so kind as to present me with," he confesses to Edward Cave, "yet I have not had time to read any farther than those first five." Having reached the thirteenth, Richardson—much like the admiring, short-winded fictional reader of Johnson's *Rambler* no. 16—breaks off to express his "inexpressibl[e]" pleasure and offer a quick comparison to the *Spectator*. Comically, in praising Johnson's originality, Richardson reveals his spotty coverage of Addison and Steele: "I remember not any thing in the Spectators . . . that half so much struck me," he writes, at least not "in those Spectators that I read, for I never found time . . . to read them all."[35]

The Rhetoric of Attention: Appealing to Pathos and Brevitas

Johnson's *Rambler* no. 191 introduces Bellaria, a young woman "four days confined to [her] chamber by a cold." This illness, we learn, has not only kept her from "three plays, nine sales, five shows, . . . six card-tables, and . . . seventeen visits"[36] but also forced her to read Johnson's essays. Short as they are, they fail to hold her attention long:

> My aunt has just brought me a bundle of your papers for my amusement. She says, you are a philosopher, and will teach me to moderate my desires, and look upon the world with indifference. . . . I have been forced, however, to sit this morning a whole quarter of an hour with your paper before my face; but just as my aunt came in, *Phyllida* had brought me a letter from Mr. *Trip*, which I put within the leaves, and read about *absence* and *inconsolableness*, and *ardour*, and *irresistible passion*, and *eternal constancy*, while my aunt imagined, that I was puzzling myself with your philosophy.[37]

Apparent attention to the Rambler's morality is only a cover for distraction. It is not clear that Bellaria reads even part of the *Rambler*; she merely sits a "quarter of an hour" with his essays before her face.

This poses a problem: if focus was so precarious, and mind wandering inevitable, how could a writer get a reader's attention in the first place, let alone sustain concentration long enough to get a message across? Rolf Engelsing describes the change in publishing and purchasing practices during the middle of the eighteenth century as a reading revolution, a move from the "intensive" devotional reading of a few books closely to the "extensive" swift reading (or more skimming) of many.[38] Yet this was also a revolution of attention—one that

extended to the marketing and correction of distraction. Whether or not readers were oversaturated by print, widespread belief in their problems of attention led to the development of rhetorical practices—and popular handbooks on engaging the diverted—that revolutionized and retrained popular focus. Scottish rhetorician Hugh Blair put it frankly in his *Rhetoric and Belles Lettres*: "He who attempts to instruct mankind, without studying, at the same time, to engage their attention . . . is not likely to prove successful."[39] Recognizing that attention reform could not occur without an audience, Johnson translated the century's popular ideas about the rhetoric of attention into a two-part narrative strategy: crafting characters with which modern readers could identify and making frequent references to just how short his essays were.[40]

Appealing to an imagined set of readers with limited attention spans—if like Bellaria, under fifteen minutes—the *Rambler* and *Idler* turn shortness into an explicit advertisement. The Rambler, we learn, will publish only "a *short* essay on Tuesday and Saturday" and declares that if the pieces are not "commended for [their] beauty," he will be "at least pardoned for their brevity."[41] Ironically, Johnson's essays were relatively long and his repeated comments on their shortness only lengthened them further. His *Rambler* averaged 1,450 words, with most of the *Idlers* clocking in at 1,050 to 1,100 words, both outrunning the standard reading length of a *Tatler* or *Spectator*.[42]

Commenting on shortness, however, drew on a rising commonplace of eighteenth-century rhetoric; forecasting the end of an essay was imagined to hold readers' attention. In his *A Treatise on Education* (1749), James Barclay describes this end-in-sight principle in terms of school children who know that recess is coming. "The promise of an hour's play," Barclay writes, "attracts the most wandering attention. With a view to such rewards they often prepare in one hour, what they have slept over more than three."[43] Talking about an essay's shortness, similarly, let audiences know that they only needed to focus a little longer. As Blair explains, cuing an end worked like dividing a sermon into heads: it gives "the audience the opportunity of knowing . . . when they are to be released from the fatigue of attention, and thereby make[s] them follow the Speaker more patiently."[44] Well-advertised brevity vivifies focus.

Short genres like the periodical essay were thus imagined to hold a distinct appeal for distracted readers. The ability to see the end of an essay—indeed, hold it in one's hand—was a powerful, tangible argument for finishing. As the abridger of Blair's 557-page *Lectures* notes, "many terrified at the idea of traveling over a ponderous volume" will "set out [with alacrity] on a short [one]."[45] In his original version, the conscientious Scotsman makes an extended argument for the value of brevity. Concise prose, he argues, produces better habits of concentration by isolating a single object for attention: "Were any object . . . to be presented to me, of whose structure I wanted to form a distinct notion,"

he writes, "I would . . . require it to be brought before me by itself, and to stand alone, that there might be nothing to distract my attention."[46] Blair believed so deeply in brevity's value that he actually urged writers to eliminate all synonyms: "Feeble writers employ a multitude of words to make themselves understood, as they think, more distinctly; and they only confound the reader. . . . When an author tells me of his hero's *courage* in the day of battle, the expression is precise, and I understand it fully. But if, from the desire of multiplying words, he . . . praise[s] his *courage* and *fortitude*; at the moment he joins these words together, my idea begins to waver."[47] According to Blair's rhetoric, synonyms ask the "human mind" to do an impossible cognitive task: "view . . . more than one object at a time" without confusion. Authors prone to a "superfluity of words" divert the reader's mind between these options rather than focusing on one, while compact language could fix a reader's fluctuating mind. Eighteenth-century music theorists recommended a similar simplification of the melodic line; according to Johann Georg Sulzer, melodies should be limited to a "short . . . phrase of two, three or four bars."[48]

The notion of a "superfluity of words" did not apply only to synonyms, however; a thick or weighty book, too, implied a length of engagement that promised to exceed attention's natural reach. Supposedly, authors of long works would find themselves roaming the streets in search of praise from attentive readers, only to find their just-published book lost amid a surge of urban distractions. The fiercest competition for a weighty tome seemed to come from genres like the magazine and the anthology, which touted their ability to condense miscellaneous entertainments into a well-crafted bundle. Combining essays, news, and anecdotes with "letters to the editor, memoirs, and antiquities, [as well as] notices of births, marriages and deaths, and stock prices," George Carver notes, popular works such as the *Gentleman's Magazine* advertised their ability to offer readers the highest amount of diversion in the shortest form, claiming to provide "greater variety than any book of its kind."[49] In competition with such attention-friendly genres—a montage of snippets carefully culled to relate the most interesting news of the day, advertise the most fashionable trends, and appeal to the widest variety of readers—a long monograph was considered doomed. Instead of a city full of panegyrics on his extensive brilliance, in Johnson's anecdote, the fictional writer hears stories that reflect London audiences' miscellany-scattered minds, learning "in one quarter of a cricket-match, in another of a pick-pocket; is told by some of an unexpected bankruptcy, by others of a turtle feast; is sometimes provoked by importunate enquiries after the white bear, and sometimes with praises of the dancing dog."[50] In an emerging modern print market, trendy glibness and whimsical ephemera trump prolixity, no matter how profound.

Readers attracted to such miscellany saturate Johnson's essays. The inatten-

tive Bellaria is joined by a parade of similar characters who fail to concentrate on the essays long enough to finish them. The fictional Euphelia admits from the start to "frequently lay[ing] [his] papers aside before [she had] read them through."[51] Flirtilla, put off by his "solemn, serious, dictatorial" style, accuses the Rambler of lacking "activity of body" and "sprightliness of mind" and feeds his essays to her pet monkey.[52] Garrett Stewart argues that "the eighteenth-century pioneers of prose fiction . . . peopled the novel with avatars of fictional attention, not infrequently with individual personifications of its readers," asking audiences to take on a parallel "place of engagement."[53] Johnson's scenes of transient focus offer an intriguing variation on such "avatars of . . . attention"; his audience's identification with the *distracted* character becomes a tool of focus. His commentary on distraction does more than provide a satire on diversion—or model self-consciousness about readers' potential disinterest. These characters tap a rising set of rhetorical theories that explicitly connect pathos, attention, and readers' narcissism. Blair put it succinctly in his *Rhetoric*: "Whenever you bring forth what a man feels to touch his own character . . . you are sure of interesting him."[54]

Johnson proved to be one of the premiere eighteenth-century theorists to combine the rhetoric of pathos with attention theory. According to the *Idler*, crafting moments of shared experience for distracted readers was the key to their attention: "such is every man's attention to himself, that what is common and unheeded when it is only seen, becomes remarkable and peculiar when we happen to feel it."[55] By consequence, his primary concern about the modern novel—namely, its move away from high Romance and toward everyday events and heroes with which readers could identify—becomes one of the core principles guiding his translation of distraction into a didactic narrative of attention. Depicting things "that daily happen in the world" and traits "really to be found in . . . mankind" drastically increased readers' chances of identifying with characters, giving works an unprecedented—potentially dangerous—power over audience attention and behavior. (To level one's hero "with the rest of the world," supposedly, meant spectators would "fix their eyes upon him with closer attention" and use his actions "to regulate their own practices.")[56]

This description of narrative's power to provide virtual experience resonates with contemporary descriptions of reading and empathy in modern cognitive science. Neuroimaging studies that isolate the brain regions activated when a reader visualizes a character's experience have shown that reading phrases such as "Pablo kicked the ball" in one experiment and "He held up the candy" in another stimulate the motor and somatosensory cortices in narrowly defined functional regions that correspond to hand and foot representations.[57] Still more interestingly, work on empathy and dehumanization suggests that identification with characters via shared experience is crucial to the activation of "Theory of

Mind," regions responsible for inferring another person's (or character's) mental state. "Familiar social targets generate positive affect that links, in part, to the self," notes social neuroscientist Lasana Harris, while out-groups that tend to "elicit disgust" or detachment (such as "homeless people, drug addicts," or those defined as cultural others) deactivate Theory of Mind, instead activating regions associated with object processing.[58]

In Johnson, distraction becomes an appeal to pathos—the allure of shared emotions and mental states. If, as William Adams claimed, "dissipation of mind, and inattention to all things serious, and, of consequence [was] the prevailing character of the age," the distracted Idler would have received universal notice.[59] Such a character could claim camaraderie with all mankind: "If similitude of manners be a motive to kindness, the *Idler* may flatter himself with universal Patronage. There is no single character under which such numbers are comprised. Every man is, or hopes to be, an *Idler*. . . . It is at least a Definition from which none that shall find it in this Paper can be excepted; for who can be more idle than the Reader of the *Idler*?"[60] Like the distracted Euphelia, Bellaria, and Flirtilla, the Idler capitalizes on audiences' presumed affinity for their like: "one of the amusements of idleness," Johnson quips, "is reading without the fatigue of close attention."[61] Consequently, no reader of the *Idler* can avoid empathizing with its author—or so the joke goes; readers' sympathy became inescapable the moment they picked up his paper. This original "hailing" of an unfocused eighteenth-century audience relies on a play of identification that also lays bare its rhetorical staging. The definition, "Every man is, or hopes to be, an *Idler*," reinscribes the reader by placing him within the larger general group (mankind) and ascribing a characteristic to it: idleness. As readers reach the line "none that shall find it in this Paper can be excepted," metareferences render them triply inscribed; in this instant, the act of reading—and their engagement with an essay about idleness and distraction—becomes a forced signifier, the quintessential mark of their identification with its author.

The Essay as a Tool of Focus

As historians of focus from Jonathan Crary to Nicholas Dames note, "Attention . . . is constantly in danger of slipping into its supposed opposite, distraction"; focus is haunted "by the possibility of its own excess."[62] Yet in the *Rambler* and *Idler*, this opposition works in reverse. Distraction constantly slips into—and guides readers toward—stronger concentration. Every diversion carves out the possibility for sustained, controlled, or otherwise uninterrupted forms of focus. Johnson's essays of distraction thus embody a paradox that faced any eighteenth-century thinker interested in reforming attention: how could one hold the focus of someone with a short attention span long enough to retrain it? What methods and genres worked best to teach sustained focus, particularly

in the face of distraction? Perhaps most important, could readers be trained to *modulate*—or economize—their attention amid cognitive overload, consciously directing their minds to grant different tasks, books, or entertainments more or less energy?

As a modern author, Johnson expects readers' minds to ramble. (As he put it in the *Rambler* no. 89, "It is certain, that, with or without our consent . . . the mind will break, from confinement to its stated task, into sudden excursions.")[63] Yet as a Christian, he believes it is his—and mankind's—duty to keep the mind focused on God.[64] The question, of course, was *how?* One obvious option was prayer. (As Samuel Carr put it in his *Sermons on Practical Subjects* [1795], "he who can stop the perturbed waves of the sea, and say to the storm, 'peace, be still,' can also fix a wandering mind.")[65] Another was direct moral instruction, which fills Johnson's essays. As early as his eighth paper, the Rambler drops the conceit of distraction, devoting the piece in toto to teaching readers to "fix" their wandering minds. In case we ever doubted Johnson's moral views, distraction is here called a "disease of the soul."[66] By *Rambler* no. 25, the avoidance of mental wandering has become the proper goal of all mankind: "To walk with circumspection and steadiness in the right path," he urges, "at an equal distance between the extremes of error, ought to be the *constant endeavour* of every reasonable being."[67]

Interestingly, this language of fixity, and the idea of cognitive agency embedded in the metaphor of attention as line, highlights a key conflict between the century's competing visions of focus. The classical model theorized voluntary attention—what cognitive scientists today call *endogenous* focus—and suggested concentration could (and should) be governed. We see this in Johnson's *Dictionary*, which defines attention as an act of will: "To ATTEND. *v.a.* To regard; to fix the mind upon."[68] Alternative ideas about attention instead emphasized attention's temporal spontaneity. Writers of this philosophical bent described what we now call *exogenous attention*, in which, as Johnson and Proctor suggest, "attention is drawn automatically toward a stimulus."[69] Locke suggested this much earlier, contending that the mind engages the world "with several Degrees of Attention" that range "between earnest Study and very near minding nothing at all."[70] The more radical Hume describes attention as so fragile that, at even the slightest interruption, the mind will relax like a spring,[71] becoming endlessly vulnerable to drift. By attributing temporal boundaries to focus, such writers begin to forge a metaphorics of periodicity crucial to the idea of "attention span."

The *Rambler* defines piety—and redefines attention—in terms of personal control, describing it as "the perpetual renovation of the motives to virtue, by a voluntary employment of our mind."[72] Reclaiming the essay tradition in this spirit required the creation of a narrative that required profound labor from

readers—training them in self-monitoring as well as cognitive skills for extending concentration—without triggering their instinct to put it down by presenting them with exceedingly difficult material or excessive moralizing.

Johnson's closest ally here was German attention theorist Georg Friederich Meier. Like his English and French contemporaries, Meier compared attention to a beam of light directed toward an object to increase clarity. More radically, however, he claimed attention as the "first" of the "lower cognitive faculties," arguing that all other mental functions were reliant on—indeed, derived from—one's powers of focus: "[I]t is impossible to improve any other cognitive faculty if one has not first improved the attention. . . . [A]ll the other lower cognitive faculties, apart from abstraction, are nothing but particular types of attention; all the rules, therefore, which one must practise for the improvement of the attention, one must also practise when one wants to improve all the other cognitive faculties."[73] As Matthew Riley notes, Meier's *Anfangsfünd aller schönen Wissenschaften* (1748–50) distinguishes three "main perfections" of attention, "the perfections of breadth, strength and prolonged use (*Weite, Stärke, anhaltendes Gebrauch*)," that is, "the number of features to which we can attend at once, . . . the degree of clarity to which we can bring those features, [and] the amount of time we can attend to something at a given level of clarity."[74] Most important, Meier saw these "perfections" of attention as trainable—and particularly responsive to the fine arts. Retheorizing the last of these "perfections," Johnson's *Rambler* and *Idler* prove crucial to the history of sustained attention and mind wandering; their serial form provided a constant lesson in training attention's precision and strength over longer durations.

In this spirit of attention's perfectibility, his essays emphasize effort and training. His *Rambler* no. 7 urges readers to see their focal willpower as capable of immense strength, imagining themselves directing (and sustaining) attention with unprecedented power. To resist the distractions that "solicit . . . attention by pressing on [the] senses,"[75] the essays at first seem to recommend the cultivation of an incessant vigilance, ignoring temporal limitations on focus. Yet in describing pious attention as a "perpetual renovation of the motives to virtue," the *Rambler* invokes the second meaning of the term *perpetual*: "occurring repeatedly; so frequent as to seem endless and uninterrupted." Only with repeated effort, he thought, could we resist the "diversions, of the world" that are always "calling [us] off" from a life of piety into morally dangerous mental wandering.[76]

Against the century's rising emphasis on the temporal limitations of focus, Johnson's essays encourage readers to become aware of their rhythms of distraction and develop stronger faculties for sustaining attention. Training them in a cognitive task of the highest difficulty—attention to their own attention—and using the serial form to provide periodic incitements to stretch their minds fur-

ther, the essay, despite its two-page length, becomes a key tool in the century's larger attempt to increase attention span.

Training Attention to Attention

Paying attention to our attention—particularly trying to notice moments of wandering—is one of the hardest cognitive tasks we can set ourselves. Modern cognitive studies suggest we are rarely aware of our mind wandering. Experiments that ask subjects to self-report cognitive drift suggest we are prone to drastically underestimate our distraction; as Smallwood and Schooler note, "individuals often fail to notice that their attention has left the primary task."[77] (In fact, as a recent study of distraction and reading suggests, individuals were mind wandering about 9 percent of the time, without being aware of doing so.)[78] Our tendency to overlook small—often banal—moments of distraction in daily life becomes especially apparent when we consider the increase in reported rates of mind wandering when researchers use *thought probes*, "brief interruptions to [an] ongoing task that ask subjects [about] their immediately preceding thought."[79] As these studies suggest, it is difficult to monitor our own distraction, but this capacity improves when we are cued—or instructed—to notice it.

Filled with moral directives on attention, the *Rambler* and *Idler* repeatedly ask readers to notice their distraction. "*Keep thine eye fixed upon the end of life*," Johnson declares early in the *Rambler*, entreating his audience to focus on the rewards of piety.[80] "A frequent and attentive prospect of that hour, which must put a period to all our schemes" is "of the utmost efficacy"; he who "begin[s] every day with a serious reflection, that he is born to die" is also he who avoids wandering into eternal damnation.[81] To sustain such a "frequent and attentive prospect," however, one first needed to know when one was wandering. Moreover, as Johnson and his contemporaries well knew, didactic writing—a parade of advice on how to remain attentive—would be unlikely to hold readers' interest long. Describing reading Allestree's *Wholy Duty of Man* as a child, Johnson called that Sunday a "heavy day"; paralleling Bellaria and her aunt, he is "confined" to the house by his mother, who "made me read [it] a great part of which I could derive no instruction."[82] Thus his axiom: books "consulted by occasional necessity . . . seldom leave any traces on the mind," while pleasure "always secures attention."[83]

Rhetorically speaking, it was an accepted truism that stories—particularly those that blended diversion and instruction—were pedagogically useful, rewriting Horace's famous classical imperative *dulce et utile* (to please and to instruct) in terms of eighteenth-century theories of attention. Richard Graves's *The Spiritual Quixote* (1773) put it succinctly: "[A] Don Quixote or a Gil Blas . . . will furnish more hints for correcting the . . . morals of young persons. . . . than

volumes of severe precepts seriously delivered and dogmatically inforced."[84] Specialists in children's literature repeated this idea that narrative could sweeten the bitter pill of didacticism. Mrs. Slack's anthology for children, *The Pleasing Instructor* (1756), claims its stories "recommend it to young Minds, *whose Attentions [being] thereby particularly engaged.* . . . Morality steals insensibly on their good Graces."[85] Anecdotes about eighteenth-century children's reading practices suggest this was more than mere advertisement. In 1793, for instance, the mother of one John Marsh speaks delightedly about how a story of a pope caught the "attention" of her son, who had "seldom evinced much taste for reading"; he rapidly pages "through" *The Life of Pope Sixtus V* when, before, "a very few pages at a time . . . used to satisfy."[86]

The characters in the *Rambler* and *Idler* seek to engage readers' attention in similarly unexpected ways, precisely to attract readers who might have turned away from more "heavy" material. Take, for example, *Rambler* no. 19—the story of Polyphilius, a man of genius and a lover of many things who wanders from profession to profession. From its opening epigraph, the *Rambler*'s narration draws readers' attention to Polyphilius's indecisive wavering:

> To rhetoric now, and now to law inclin'd,
> Uncertain where to fix thy changing mind;
> Old *Priam*'s age or *Nestor*'s may be out,
> And thou, O *Taurus*, still go on in doubt.
> Come then, how long such wav'ring shall we see?
> Thou may'st doubt on: thou now can'st nothing be. F. Lewis[87]

The first lines of the story redouble this cue. The distracted hero enters the tale as a notable object of focus. Separating him from the "general mass of wretchedness" (and the little "regard" we pay them), the narrator notes the distinctive eminence that "marks [him] out from the multitude"; he is a man worth "fix-[ing] our eyes upon."[88]

Like the "social blunder" Kent Puckett observes in the nineteenth-century novel, distraction in the eighteenth-century essay is a figure that "demands from its reader special attention to the fact of form."[89] The story of a character's mind wandering, as we will see, demands meta-awareness and thus a self-conscious focus on our own attention in reading. The *Rambler*'s opening frame segues into a narrative that repeatedly challenges readers to notice mistakes of focus. Noticing these errors of attention was a key component of the essay's larger revision of ideas about how to retrain the "human perfection" of attention; its cognitive-narrative exercises not only assume that awareness of distraction is the first step in increasing focus's strength, clarity, and fortitude but also presume problems of distraction are global rather than individual idiosyncrasies. Only

then can the plotting of one character's wandering mind become a parable to solve all its varieties.

If before, readers' attention was framed in the paratext, focal prompts now enter the story's deep structure, moving from *suzjet* to *fabula*. The hero's short attention span becomes a plot pivot, motivating each turn. Of course, they come quickly. Having finished school, Polyphilius chooses a profession without forethought. Out on a "ramble," he first falls "accidentally among the physicians," but after a few hours, he decides to try out anatomy, botany, and chemistry and later continues to law, the military, and finally academia (166). Polyphilius's wanderings thus embody the phenomenon of contagious distraction. As Ross Chambers notes in *Loiterature*, digressive pleasures rely on "the relaxation of vigilance, the abandonment of discipline . . . [the idea] that desire can't, and so should not be confined." Yet its pleasures are also what render all the warnings about slippery slopes appropriate: "Digression happens because it can happen, but it escalates because what can happen, once it escapes control, will go on happening."[90] Pursuing disconnected lines of inquiry, from the study of Chinese ciphers to Corinthian brass, leaves Polyphilius's "powerful genius . . . dissipated in a boundless variety"; unable to constrain his attention to a single task, he completes none (171).

Alongside this description of Polyphilius as a distracted character, we find narrative structures that urge readers to detach from the sympathetic power of wandering to identify with a second group: the all-attentive audience, watching him. The hero operates (and errs), within a narrative frame with "every academical eye . . . fixed upon him"—a story told by an essayist who has been making him an object of constant observation "for many years" (165, 164). Vigilance to distraction becomes a didactic metaframe, inviting the *Rambler*'s audience to judge attentively. (And in case these not-so-subtle cues are lost, the narrator explicitly instructs readers to "follow the hero, with our whole attention" through all "the varieties of his fortune" [164].) Explicitly, the story is meant to teach readers that he who wanders is lost. Yet its structure is also meant to teach readers the cognitive metaskill of focusing on focus. The central character of the essay is not a figure but a cognitive habit: focusing on distraction with our "whole attention."

Strengthening Focus: Repetition and Dramatic Irony

In a digression on operant conditioning from *A Journey Through Spain*, Joseph Townsend suggests that repetition is the key to awakening and directing focus. Commenting on Spain's docile mules, he notes with astonishment that they can draw a cart without a bridle. The drivers have trained their beasts, via repetition, to respond to vocal cues; each mule could recognize the sound of her name and

be redirected on command: "In this little journey, I was exceedingly diverted and surprised with the docility of the mules. . . . [S]hould anyone refuse the collar, or not keep up exactly with the rest, whether it be, for example *Coronela* or *Capitana*; the name pronounced with a degree of vehemence, rapidly in the three first syllables and slowly in the last, being sufficient to waken attention, and to secure obedience, the ears are raised, and the mule instantly exerts her strength."[91] If repetition and routine are cornerstones of a mules' training, then the short, serial periodical essay is the ideal genre to alter human behavior—particularly to train readers to "exert [their] strength." Applying the rules of mules to men, however, had its challenges—using the short essay to lengthen attention span was a paradoxical endeavor.

According to Maria Edgeworth, however, teaching literacy to children required a similar process of short, repeated training. Children's attention spans meant that early reading needed to be reduced to short bursts, each letter "shewn . . . for a minute or two, twice a-day," a process close to the split syllables of *Co-ro-ne-la* or *Ca-pi-ta-na*.[92] Again, theories from the Enlightenment frame experiments in cognitive attention studies. Neuroscientist Anthony Ward emphasizes the importance of repetition for decreasing cognitive load, allowing longer, more sustained attention. Studies of automatic processing, he explains, suggest that while a "novel task requires a great deal of effort and concentration . . . [w]ith practice, the task requires less effort and becomes automatic." Because they require less "'controlled processing' . . . [a]utomatic tasks require less attentional capacity."[93] In this spirit, the *Rambler* and *Idler* offer moral after moral, story after story of distracted reading, teaching audiences to respond to a set of scenarios and characters in which naming distraction cues readers to exert themselves toward a rigorously directed, consciously sustained attention. According to Michael Lund and Linda Hughes, serial forms demanded "long-term commitment . . . the ability to connect distant pieces of a whole, [and] regular, disciplined effort,"[94] offering scenes of distracted reading that had to be assembled by audiences into a coherent whole.

Johnson's essays rely on the power of repetition, interspersing its meditations on—and moral injunctions regarding—attention in the voice of the Rambler or Idler with stories of distracted characters and readers. As was common for the genre, these figures usually entered via the letter to the editor, which wholly occupied the space of the essay. Departing from the serious tone of many of his *Rambler* and *Idler* essays, these letters substituted for his pseudodistracted personae to offer comic stories of diverted attention (often, diverted from his essays) that encourage readers to attend to and modify their own habits of focus. Layered with dramatic irony and foreshadowing the consequences of distraction from a satiric distance, his essays become a training ground for habits of concentration that could be extended long after the act of reading was done.

The narrative of a distracted character, in Johnson, relies on operant conditioning (a mixture of carrot and stick) to provide "perpetual motivations to virtue," both incitements to and lessons in directed attention. Take, for instance, the story of Euphelia: this disenchanted belle not only "frequently" lays *Rambler* essays "aside," she also "languish[es] in a dead calm, for want of some external impulse."[95] Robbed of conventional urban stimuli on a short countryside vacation, she longs for stimulation to prod her action, wandering from place to place in search of entertainment: "I go out and return; I pluck a flower, and throw it away; . . . I fling a pebble into the water and see one circle spread after another," yet all ends with her watching "the minute-hand upon the dial."[96] Without direction, Euphelia cannot indulge in the pleasures of a countryside ramble, physically or cognitively: "I am forced to be awake at least twelve hours, without visits, without cards, without laughter, and without flattery. I walk because I am disgusted with sitting still, and sit down because I am weary with walking. I have no motive to action, nor any object of love, or hate, or fear, or inclination."[97] Her misery exemplifies the affective costs of undirected focus. If the promise of heavenly rewards was the traditional "carrot" for sustained attention, narratives that linked the undirected mind to chronic boredom provide the quintessential "stick." Harnessing both the boredom and the didactic force of repetition, the fictionalized Euphelia reiterates her misery, reinforcing the affective hazards of externally motivated attention.

Yet her repeated grousing also puts readers into an interesting space. Her complaints, they can see, refuse agency. She is "forced" to be awake; and though she "walks," "plucks" plants, throws stones, and watches clocks, Euphelia takes no responsibility for having "no motive to action." She is not bored; the world bores her, a pattern of externalization that, as Patricia Spacks notes, models a gradual displacement of individual responsibility for one's entertainment onto the environment. Euphelia's refusal to claim responsibility for her attention asks readers to direct attention to this deeper problem: her. Like Polyphilius's lifelong wandering as an oblivious multifocal scholar, this story urges readers to attend to the particularities of distraction.

Rather than sustaining a bird's-eye view of a life as in Polyphilius's tale, this essay addresses Euphelia's behaviors at a micro level. Only by building a larger narrative out of these minutiae—training both our selective focus and our ability to see the forest amid the trees—can we recognize the point: Euphelia lacks the internal impetus necessary to generate cognitive activity. Without stimulation, her ad hoc diversions fail to satisfy. To diagnose this problem requires a voluntary shift away from her environment (the details the heroine notices) to internal qualities of character and focus (what she ignores in her narration). Narrative structure thus trains readers to direct concentration at will, forcing them to move between content and presentation to extrapolate meaning from

the form the story's telling takes. Her litany of complaints about inattention, reframed as that day's essay, becomes the ideal form to motivate readers to recognize, take responsibility for, and direct their wandering minds, protecting them from the central cause of Euphelia's unhappiness and cognitive vacancy.

This is not to say that Johnson refrains from explicit moral instruction. Around these fictionalized letters to the editor, the *Rambler* repeatedly endorses the virtue (and possibility) of directed focus. In line with traditional Christian and philosophical doctrine, he proclaims we have agency over attention: "the balance" between focus and wandering "is put into our own hands, and we have power to transfer the weight to either side."[98] Despite his discussions of wandering attention elsewhere, Locke believed this capacity to control focus was so important that he compared our ability to select thoughts to our ability to move our limbs. Without it, humans would live in a state of constant stupor, unable to move through the world:

> The infinite Wise Author of our being, having given us the power over several parts of our Bodies, to move or keep them at rest, as we think fit; and also by the motion of them, to move our selves, [has] also given a power to our Minds, in several Instances, to chuse, amongst its *Ideas*, which it will think on. . . . If this were wholly separated from all our outward Sensations, and inward Thoughts, we should have no reason to preferr one Thought or Action, to another; Negligence, to Attention; or Motion to Rest. And so we should neither stir our Bodies, nor employ our Minds; but let our Thoughts (if I may so call it) run a drift, without any direction or design; and suffer the *Ideas* of our Minds, . . . to make their appearances there, as it happen'd, without attending to them.[99]

As Johnson's *Idler* is both a serial publication and a persona, at least something is always on the move: his latest broadsheets.[100] A new tale of distraction always appears to supplant and add to the lessons of another. If Euphelia embodies the urban socialite at loose ends during her countryside vacation, the listlessness of the idle Dick Linger extends her boredom far beyond the narrow scope of her six-week retreat—into the city. Illustrating the lifelong ramifications of a "mind" that moves without "direction or design," *Idler* no. 22 replaces Euphelia's hopes for respite upon returning to London with a mature view of the tedium that adjoins undirected attention over time:

> Dear Mr. Idler,
>
> There is a species of misery or of disease, for which our language is commonly supposed to be without a name, but which I think is emphatically enough denominated *Listlessness*, and which is commonly termed, a want of something to do. Of the unhappiness of this state I do not expect all your readers to have an adequate idea.[101]

Describing himself as a man with a mind not quiet enough to endure a "voluntary lethargy" but also not "narrow" enough to be easily "filled to their utmost capacity,"[102] Linger demonstrates that any focus that relies on external stimuli for excitement will wither, in the end, into "negligence" (Locke) and "listlessness" (Johnson).

This form of distraction, like its sister vices curiosity and boredom, was imagined to have severe (potentially permanent) affective consequences. Lord Shaftesbury's *Second Characters*, for example, couples complaints about the wandering's misery to a lack of internal motivation. Even misers, hoarders, and virtuosi—reliant on external stimuli—fare better than the disengaged; at least they have an object of focus:

> Extemporary life miserable. Better the settled miser or covetous passion . . . than the full, easy, contented, but uncertain floating. . . . But "what shall I do next?" . . . "Whither shall we go?" "How pass our time, till such or such an hour, the opera play, etc.?" In the interim caught by a thousand passions, hooks, snares: always sure to catch those who are not engaged. But the accumulator (though the worst employed) more secure. The collector of a cabinet and the intent virtuoso, still more secure as nearer order, virtue, beauty.[103]

Like Euphelia and Shaftesbury's figure, the "uncertain floating" of Linger's mind is a direct cause of his misery. Uncertain how to "pass the time," he stands and sits, walks and stops, and watches the clock tick. Even his interest in news, we learn, is fake, an excuse contrived to visit friends. Distraction multiplies the pains of ennui by transmitting them to others, motivating his friends to mirror his clock-watching while awaiting his exit. This tale of lingering, and its end in social shame, draws us not simply toward the hero's inability to direct attention but toward its long-term consequences, including his inactivity's contagious power to spread a listless misery.

Yet it is Bellaria, with whom we began, who sins most deeply against the injunction of "close attention without wandering" and stretches our attention furthest into the future. Eluding her aunt's surveillance, she fails to heed the social and moral imperative to be a "good" (i.e., disciplined, well-focused) reader, merely staring at his essay for a quarter hour and using it to hide some love letters. The story does not end with the expected moment of discovery and punishment: no one even *notices* her game. Instead, she faces a danger far in excess of her "crime," urging readers to predict the fate she ignores. Though her family hopes reading will "preserve" her from temptations and that "tragick stories of the cruelty, perfidy, and artifices of men" will arouse her vigilance to sexual danger, Bellaria remains (dramatically) "at a loss."[104] Naively, she declares: "I have not since my entrance into the world found one who does not profess himself devoted to my service, and ready to live or die as I shall command him."[105] Her

difficulty sustaining attention to Johnson's essays is matched by a challenge in extending focus beyond the present. The essay concludes by suggesting that she is about to accept an invitation to play cards (alone) with a seedy gentleman twice her age: "Even Mr. *Shuffle*, a grave gentleman, who has daughters older than myself, plays with me so negligently, that I am sometimes inclined to believe he loses his money by design, and yet he is so fond of play, that he says, he will one day take me to his house in the country; that we may try by ourselves who can conquer."[106] Readers attuned to the irony of his "negligence," his "fond[ness] of play," and the double entendre of conquest recognize his real designs; they attend to the details she ignores. Bellaria's innocent breaking of the "rules" of attention to read romantic letters rather than Johnson's essays in fact predicts a larger breakdown of the social-sexual system: the violation of codes of courtship and the projected loss of her virginity—literally, the breaking of the hymen.

This story of mindless distraction does more than plot the punishment of the inattentive reader; it turns dramatic irony into a tool of sustained attention. The passage's style—always implying rather than explicitly narrating the heroine's future—encourages us to attend to the cues that foreshadow her fall; the ignorance of risk that adjoins her foreshortened attention and present-tense concentration requires us to extend our attention to predict her fate. This mis en abyme of attention is also a mis en abyme of attentive reading. The belle's scene of distracted reading also seeks "to form [the] reading" of that scene, conscripting, as Stewart puts it, a "reader whose attention it configures from within."[107] In such fictional scenes of reading:

> [T]he displacement from [the] immediate [act of] reading to [the] depicted site of narrative consumption involves the simultaneous mirroring and (hence necessary) evacuation of the reader from the scenes they represent. . . . [The] reading figure [may invite in real readers] a symbolic pattern of heightened attentiveness, of interpretive capacity, passive reception, of the vicarious subjection—any number of "characterizations" will do. . . . To recognize the most fundamental of these complications is to shift ground from the textual network to the phenomenology of its internalization in the reading act. This is still a matter of narrative structure—but now as an engineering of response.[108]

Only through such a process of identification—moving from mirroring to detachment, from an observation of Bellaria's reading to a heightened attention to her future dangers—can a narrative about distraction allow the short essay to surmount the challenge of length. Deploying the trope of inattention—the "not noticing" that lies at the heart of dramatic irony—the periodical strengthens Meier's third and final "perfection": "prolonged use," increasing the amount

of time we can stretch our minds toward an object or task—indeed, toward a future we can only imagine.

Economies of Attention

The exercises in directing and sustaining concentration within the periodical essay were embedded within a worldview that organized mental life in terms of an economy of attention. In this paradigm, attention was imagined as a limited commodity, no longer to be "fixed" or "bent" to illuminate a single object but instead paid, allocated, and divided among multiple things. This financial idiom recurs in the century's complaints about print overload and attention span (decreased from novels and essays to anthologies, miscellany, and magazines), framing audience engagement through a model of literary marketability that coupled readerly attention and interest with profit. A given publication was in competition not only with the works of other publishers but with every conceivable distraction to which a reader could be exposed.[109] When Meier theorizes attention's perfectibility in *Anfangsfünd aller schönen Wissenschaften*, he also acknowledges a challenge in training it:

> Because the faculty of attention in a human being is finite and limited, it attains only a certain definite level. Whenever I direct a degree [of attention] at a representation, the remaining stock of attention is decreased. So if I pay heed to many different things at the same time, it is inevitable that I cannot pay such strong heed to a given object as when I directed my whole attention to it alone. Whenever the attention to a given thing is reduced because at the same time one is directing it at many other things, we find ourselves in the condition that one calls *the distraction of the spirit.*[110]

Sustained attention could not be infinitely extended; once spent, time and attention could not be recouped. The mind, like an account, could run a deficit. If the "stock of attention is decreased" to the point of depletion through multifocal processing, one risks no longer being capable of directing focus: a state of mind known as "distraction of the spirit."

For Johnson, diversion not only risked depleting a finite repository of attention, it also risked total cognitive takeover. Even seemingly insignificant distractors —"the noise of a torrent, the rustle of a wood"—had the "power to fill the attention."[111] This idea had two consequences for thinking about an economy of attention. First, any distraction has the capacity to entirely occupy—and drain the resources of—attention, a liability that could thwart the project of attention by derailing our ability to reserve focus for prioritized objects. Second, the world is brimming with distractors—a surplus of stimuli that creates excessive environmental demand, as well as an oversupply of incentives to wander. If the

sound of a twig snapping can wholly occupy the mind, London entertainments constitute literal bedlam. Attention (because limited) is scarce, while distraction (because limitless) approaches the infinite. Distraction, then, does not inhere in a particular class of objects, but in our ability—or inability—to choose how, and when, for how long, and with what intensity we direct or pay our attention. In this schema, the authorial prerogative of the essayist becomes to identify, amid a barrage of discrete and distracting particulars, those few that can be considered of practical value to the reader. By selecting a subject for each day's broadsheet, the essayist sets concrete material limits on attention; the words need to fit on the page.

Johnson's essays thus represent a compromise between a virtuous world of pious attention and the secular world of "cheap" distractions and luxury purchasing to which the periodical essay was beholden. In this compromise, Johnson and his contemporaries diverged from the essay tradition of Montaigne, who valued distraction per se, to translate the pleasures of wandering into didactic force. The essay joined anthologies, miscellanies, and magazines in advertising its ability to compress information such that it would not overtax the mind, rethinking marketability in terms of value per word: this included not just the cost of printing, but that of readerly effort. This economy, which presumed readers' inability to manage their "stock" of focus, emerges in Johnson's attentional system as an active verb: *to economize*. In the tumult of distraction, the periodical essay—short, sweet, and serial—offered an anchor by which readers could navigate their diversion-saturated environment. Foreshadowing Blair's praises of concise writing as the rhetorical grail for directed focus, the *Rambler* and *Idler* recommend a compression of prose to render each word efficient, reducing the effort required to get to the writer's main point: "To find the nearest way from truth to truth, . . . not to use more instruments where fewer will be sufficient, not to move by wheels and levers what will give way to the naked hand, is the great proof of a healthful and vigorous mind, neither feeble with helpless ignorance, nor overburdened with unweildy knowledge."[112] To economize attention (or, as he put it in his dictionary's entry for "ECONOMY," to lay it "out to the greatest advantage" and not suffer it "to run waste") had benefits for both writer and reader: increased cognitive vigor and health, conservation of mental energy, and (at least partial) freedom from the frivolous ephemera that surrounded them on a daily basis.[113]

Audiences are to model—and perform their own—budgeting of time and focus: to tread "a *right* line" or "the shortest passage from point to point" in their everyday (and readerly) lives.[114] To do this in a "readerly" sense, here, is not to indulge in the passive *plaisir* of a *lisable* Barthesian text that leaves the reader's subject position unchallenged; instead, it is to engage with prose that challenges them to fine-tune their own ability to discern and mine written works of value.

Applying the literary equivalent of Ockham's razor ("frustra fit per plura quod potest fieri per pauciora"), Johnson pushed readers into the highest level of attentional difficulty: sifting through distractions to find the discrete elements worth giving one's attention.[115]

Johnson's vision of economized attention challenged readers to pay attention to printed and manuscript texts like a writer and a critic: to scan a piece to evaluate its value in relationship to its cognitive load, to direct attention to valuable works and parts, and to notice—and modulate—our own resources of concentration. Applied to daily life, the economized relationship between writer and reader emblematized a successfully mediated—thus, virtuous—relationship between the mind and its surroundings. If "the shortest passage from point to point" describes a *right* line, the *Idler* posits, "a *right* action effects a good design by the fewest means."[116] Conveniently, morality mirrors both basic math and unifocal metaphors of focus.

Teaching readers to economize their attention, Johnson revives the classical meaning of reading as *legere* or *lectus* (in his *Dictionary*, "to gather, pick out, or choose"), a process of selective attention. He himself was famed for reading works in parts.[117] (Responding to a question about whether he had actually finished a work, he once defensively exclaimed: "Sir; do *you* read books *through*?"[118]). Instead of granting all works the same cognitive intensity, his essays advise cultivating an ability to modulate attention: to skim to discern a work's value, estimate the labor required to process it, and modulate attention to conserve energy throughout. His *Idler* essay on the "*bugbear* style" here is paradigmatic.[119] In enumerating which types of authors to avoid, it compresses advice on focal efficiency into a paragraph. Of the "species of Authors whose labours counteract themselves," we learn, there are two to dodge most fiercely: "[t]he man of exuberance and copiousness, who diffuses every thought thro' so many diversities of expression, that it is lost like water in a mist [and] [t]he ponderous dictator of sentences, whose notions are delivered in the lump, and are, like uncoined bullion, of more weight than use."[120] Engaging with concise prose economized attention by not wasting time "like water in a mist"—the equivalent, in this financial idiom, of letting money float away. Sidestepping writers who tangled their prose saved one's attention for ideas that could be easily extracted and avoided notions presented like a lump of bullion, "so buried in the mass . . . that, like silver mingled with the oar of lead, it is too little to pay for the labour of separation."[121] Only by developing an eye for valuable authors and passages could readers develop what Boswell described as the lexicographer's "peculiar faculty" for mining texts, a skill in "seizing at once what was valuable in any book, without submitting to the labour of perusing it from beginning to end."[122]

If we think recommendations of partial reading reveal a wavering Johnson,

however, or an attempt to reduce the labor of attention for the sake of ease, we are to be disappointed. Relaxed vigilance in *Paradise Lost* allows Satan's serpentine wanderings, "side-long . . . work[ing] his way" in "tortuous Train[s]" to attract Eve and, "her attention gain'd," tempt her into transgression.[123] Describing our postlapsarian state, James Foster's *Discourses on all the Principal Branches of Natural Religion and Social Virtue* (1749–52) declared any "inattention of mind . . . immediate sources of *vice*."[124] It is little surprise, then, to find that the *Idler*'s seeming relaxation reinforces traditional definitions of focus as voluntary effort. Nor was Johnson alone in suggesting directed focus lay at the core of philosophical rigor. (Such treatises rarely stated their ideas in easy, concise prose.) To develop this skill of sustaining attention amid difficulty, we can return to his essay on "*bugbear* style." His first two paragraphs on how to economize attention are each one long, dense sentence, the first eighty-six words long, the second stretching to ninety-seven. Clauses abound and intertwine, their structure blocking readers from the easy forward motion of light attention (i.e., skimming) and forcing them to process syntactic and semantic connections at each turn.[125] Cognitive studies investigating the impact of syntactic difficulty on reading time suggest eighteenth-century instincts were spot on: increases in cognitive load decrease reading speed, forcing readers to take more time. One fMRI (functional magnetic resonance imaging) experiment on the neural regions activated in sentence comprehension by Keller, Carpenter, and Just demonstrated that "mean sentence reading time . . . increased for more complex sentence types," requiring increased activation of areas in the brain associated with reading and language processing as well as regions associated with attentional functions.[126] Another study showed that "difficult text" was read more slowly than succinct, structured prose, extending the time spent on each word.[127]

Processing clauses with nested phrases, intricately subordinated syntactic units, and complex hypotheticals, cognitive linguists have shown, radically increases cognitive load, and thus the work required to sustain reading.[128] Both of Johnson's one-sentence paragraphs on attentional economy force us to manage more than eighty words as well as numerous clause fragments and hypotheticals, leveraging a chain of semicolons, commas, and conditional phrases ("it *can seldom* happen *but* he that"; *if* . . . he did *not*"; "*but* when *once* he begins")[129] to keep us—and his sentence—at the highest level of complexity. Taken together, the two sentences have six semicolons; seventeen commas; and nine hypotheticals, concessions, or negations, with numerous nonlinear embedded clauses. Each requires us to carry multiple phrases until we reach (to our delight) the sentence's end.

The structure of Johnson's sentence counters any easy interpretation of his line about finding "the shortest passage from point to point." Unable to cut corners in this message about attentional economy, we must instead hit wall after

wall of dense syntax, forced to successfully navigate "ponderous . . . sentences" and "exuberan[t] . . . copiousness" to understand his point about dodging them. Such sentences—offering advice on budgeting attention in a literary style meant to tax, and thus improve, focus—model at the micro level his essays' narrative innovation. The periodical's well-advertised brevity stretches attention's length; stories of oblivious wandering breed meta-awareness and cognitive direction; the *Rambler* and *Idler* do not, themselves, ramble but rather direct their readers toward sustained attention and strengthening focus via literary form. Boswell perhaps puts it best: "in no writings whatever can be found more *bark and steel for the mind.*"[130]

The History of Attention Span

The project of attention, that cornerstone of modern philosophy and scholarly pursuits, is not without its pitfalls. To posit focus as the mark of mental engagement, the difference between thought and not thinking, credit or demerit in the final account of virtue and vice, has profound implications when we are forced to confront the limitations of the human brain, its literal inability to perform what we have appointed as its most virtuous task. To conceive of the world, or our interactions within it, as a series of discontinuous lengths of time during which we concentrated or our minds—to invoke common idiom—were *present*, means that we will concomitantly conceive of the majority of our experience as a *null set*: the cipher, or zero, of cognitive drift. This is the history, then, not only of cognitive studies of mind wandering but of the very concept of attention span.

Our modern idea of attention span foregrounds the temporal gaps between moments of conscious cognition, using the beats of distraction to measure the rhythmic intervals between them. Yet in the eighteenth century, this conceptualization worked in reverse; traditionalists highlighted not the temporal span, or cap, of distraction on both ends of one's attentional window but the value of working to sustain focus however long one could, placing the emphasis on the duration of continuous concentration. And although the eighteenth century did not yet have a word (or set of words) to signify our modern concept of attention span, we still find it haunting Johnson: "If the most active and industrious of mankind was able, at the close of life, to recollect . . . his past moments, and distribute them, in a regular account, according to the manner in which they have been spent, it is scarcely to be imagined how few would be marked out to the mind, . . . how many chasms he would find of perfect vacuity, and how many interstitial spaces unfilled, even in the most tumultuous hurries of business, and the most eager vehemence of pursuit."[131] The postlapsarian mind may be prone to wandering and restlessness, this passage suggests, but these intervals need not go unnoticed. Acknowledging the inevitability of cognitive

drift, Johnson expands his economy of attention—the "account" of how our attention "ha[s] been spent"—to incorporate moments of distraction within the ledger of a virtuous life. The emphasis on the nigh-infinite multiplicity and inestimable magnitude of distraction in daily life—the repeated "chasms" of empty thought, the "interstitial spaces unfilled"—explodes temporal and spatial scope beyond easy comprehension and highlights our moments of concentration. In this "perfect vacuity," attention becomes synonymous with life itself.

The eighteenth-century emphasis on strengthening attention amid worldly tumults, then, can be interpreted as a stopgap measure employed to stave off these periods of wandering. In crafting our modern sense of attention and distraction, however, we need not equate distraction with emptiness. In trying to claim attention's ultimate power, the *Rambler* compares our life's points of focus to "globes of matter" that, though "scattered through the universe" can be suddenly "compressed to perfect solidity"—without wandering among them—to produce the final account of one's life: "[These] great globes of matter are thinly scattered through the universe, but the hardest bodies are so porous, that, if all matter were compressed to perfect solidity, it might be contained in a cube of a few feet. In like manner, if all the employments of life were crowded into the time which it really occupied, perhaps a few weeks, days, or hours, would be sufficient for its accomplishment, so far as the mind was engaged in the performance."[132] The final "cube" crafted from our cumulative engagement may have weight; yet the real power in this process relies on distraction: the "interstitial spaces" that divide and define these moments of focus. In this metaphor, spaces of vacuity—and the individual's act of noticing them—facilitate the centrifugal of force that concentrates matter (i.e., attention) into its utmost, albeit limited, density and value.

Attention span, now an umbrella term for decreasing focus in an age of digital multitasking, has been redefined as the mark of modern cognitive life. Today we think of attention span as the amount of time we can spend on a task before wandering. To trace its history, however, is to find a concept that mixes unifocal and multifocal views of cognition and oscillates between an emphasis on cognitive control and our involuntary breaks of focus. First used by William James in his *Principles of Psychology* (1890), the idea of a "span of consciousness," or attention, referred not to concentration's length, but to its breadth: "how many things can we attend at once?"[133] This association of span with a limited capacity—often describing large or dispersed things compressed into circumscribed space (as in the 1633 "Let the worlds riches, which dispersed lie, Contract into a span")[134]—could also apply to the short duration of a human life. Thus Edward Young's succinct complaint: "Jove mark'd for man / A scanty span."[135] Not until J. D. MacDonald's 1959 *Please Write for Details* do we find a clear description of "attention span" as a period of time or personality trait, describing

a character with "that unfortunate blend of characteristics which combines a capacity for intense enthusiasm with a curiously short attention span."[136]

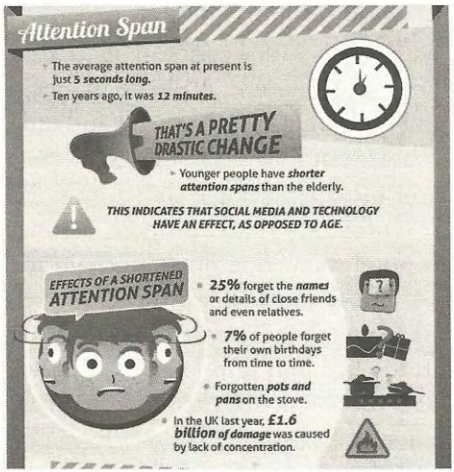
Here we have a unique conundrum. A phrase that began as multifocal and spatial has now become predominantly temporal and unifocal. Classic tests of our attention span measure not how many things we can attend to simultaneously, but the length of focus on a single chosen task. Positing distraction as cognitive digression (to "turn away from a purpose, destination, or position"),[137] these experiments on mind wandering often ascertain focus by asking: is the mind on-task or off? As this return to linear metaphors reminds us, traditional models continue to shape our ideas about—and thus the studies we craft to test—focus. As Joseph R. Urgo puts it in *In the Age of Distraction*, "Commonly considered, distraction is the absence of attention. But inattentiveness is not the whole of what distraction is. Distraction is also a form of attention, a mode of attentiveness more privately conjured."[138] Moreover, the way we think about the mind matters. In considering attention span, Bakhtin proves useful:

> The way in which [a] word conceptualizes its object is a complex act—all objects, open to dispute and overlain as they are with qualifications, are from one side highlighted while from the other side dimmed. . . . And into this complex play of light and shadow the word enters—it becomes saturated with this play, and must determine within it the boundaries of its own semantic and stylistic contours. [How] the word conceives its object is also complicated by a dialogic interaction . . . between various aspects of its socio-verbal intelligibility.[139]

Our definition of attention span, attuned to the rhythms of the mind, imagines a line of attention extended over time, punctuated by points of distraction. Distraction's rhythms, then, define our attention span.

The history of mind wandering presents another version of attention span—one that focuses on our moments of sustained (and voluntarily renewed) attention. Mind wandering still occurs, and we are meant to pay attention to it. Yet, in the metaphorics of the *Rambler* no. 8, our vast moments of distraction serve only to illuminate the "perpetual renovation" of attention. If attention span is now imagined as a cognitive timeline measured from distraction to distraction with concentration in the middle, the eighteenth-century Johnson envisions this same span measured from point of attention to point of attention, with the "interstitial spaces" of distraction in between.

While our contemporary definition removes the sinful connotation from mind wandering and reminds us of the value of breaks, it also separates focal duration from cognitive agency—both from the person and, more powerfully, from the concept of attention itself. Giving focus an inherent cap—as one paradigmatic study suggests, forty minutes on average for adults; in another, between five and twenty minutes for children between ages two and ten—rightly


Attention Span
The average attention span at present is just 5 seconds long.
Ten years ago, it was 12 minutes.
THAT'S A PRETTY DRASTIC CHANGE
Younger people have shorter attention spans than the elderly.
THIS INDICATES THAT SOCIAL MEDIA AND TECHNOLOGY HAVE AN EFFECT, AS OPPOSED TO AGE.
EFFECTS OF A SHORTENED ATTENTION SPAN
25% forget the names or details of close friends and even relatives.
7% of people forget their own birthdays from time to time.
Forgotten pots and pans on the stove.
In the UK last year, £1.6 billion of damage was caused by lack of concentration.

An infographic explaining how social media is decreasing attention span. Neil Vidyarthi, "Attention Spans Have Dropped from 12 Minutes to 5 Minutes—How Social Media is Ruining Our Minds," *Social Times*, December 14, 2011, http://socialtimes.com/attention-spans-have-dropped-from-12-minutes-to-5-seconds-how-social-media-is-ruining-our-minds-infographic_b86479.

acknowledges the effect of "age and task load" yet risks erasing individual difference within demarcated age groups owing to volition or will.[140] As our focus shifts to mind's tempo, the Enlightenment's questions about attention and mind wandering—particularly our power to extend concentration with effort—seem to have become peripheral. However, historical meanings of the word *span* may explain the popularity of apocalyptic complaints about attention's diminishing length. Reflecting our obsessive attention to distraction, a Google search of "attention span" calls up 29,700,000 pages, with the infographic "Attention Spans Have Dropped from 12 Minutes to 5 Minutes—How Social Media Is Ruining Our Minds" and statistics comparing our eight-second focus to that of a goldfish at nine seconds prominently displayed in the top five.

This deployment of distraction's wry appeal, its comedy modernized in pseudoscientific graphics and graphs, renders contemporary the trope of using short attention span to attracting an increasingly diverted public. The idea of span behind Johnson's attentional accounting—not only the space (a hand's width) or a time period (our hours, minutes, and seconds), but the extent of a human life (the "scanty span" that "Jove mark'd for man")—moreover, may reveal concerns lying behind recycled comments about dwindling focus: what will a life composed of such moments add up to?

By carving out a space that acknowledges the value of directed focus as well as the immensity of our distraction, the eighteenth-century rewriting of volun-

tary attention reveals something that can be lost if we take modern cognitive definitions of focus for granted. His emphasis on cognitive control, his interest in training and extending focus, and his use of an economy of attention to inscribe attention within the realm of virtue brush up against—and thus help us draw out—ideological threads that connect disparate categories and subfields in attention studies. The tradition Johnson and his contemporaries represent is far from gone. It has simply moved outside the framework of attention span into another rubric: "sustained attention" and "cognitive control."

In these neuroscientific studies, the language of meta-awareness, economy, and allocation of cognitive resources represented in the *Rambler* and *Idler* has taken over. The idea that voluntary focus—what Johnson called the "power to transfer . . . weight" from one thought to another or what Locke described as the mind's "power . . . to chuse, amongst its *Ideas*, which it will think on . . . with consideration and attention"—should be considered within an economy of attention has grown so common that it is now embedded within the very name cognitive scientists give to the brain regions involved in endogenous attention: the "executive functions." Relying on an implicit corporate metaphorics—a model of mind in which the brain's "top-down" functions are controlled by a cognitive executive with mental processes comparable to a CEO or board of directors—the executive functions describe regions in the frontal lobe that allow us to direct our attention to the most pertinent elements in our environment. In *Attention: A Neuropsychological Approach*, Anthony Ward casts concentration as a scarce resource and aligns executive functions with cognitive control. "Executive processes," he writes, "measure our ability to direct our . . . will," allowing us to allocate attention to "concentrate processing resources on the resolution of complex novel tasks, while inhibiting irrelevant responses and staying free from distraction."[141] Most cognitive scientists, moreover, imagine these faculties as efficiently allocating a limited set of attentional funds to handle environmental demands. These theorists emphasize not the "length" of attention span, but the difficulty of the task and the effort expended. Their focus, like Johnson's, is on the question of how to allocate attention to manage cognitive load (i.e., how to economize it).

And Johnson's theorization of mind wandering reaches beyond the rarified argon of cognitive science, emerging in the idiosyncratic memes surrounding the idea of attention span in twenty-first-century popular culture. The Google search of "attention span" that highlighted our supposed seven-minute decrease and the rising focal power of goldfish) also reveals interest in the traditional goals of teaching, training, and managing focus. In its top twelve entries, alongside the requisite *Wikipedia* entry and two tests of attention span, we find a blog post, "How Can I Improve My Short Attention Span?," an article on how to "streamline your website to grab . . . attention" in an "Age of Multi-tasking," as

well as two essays on training attention that echo the eighteenth-century divide between teaching focus and accommodating distraction. The first, a Johnsonian piece entitled "Paying Attention Is a Skill: Schools Need to Teach It" (September 2013), makes its point in its subtitle, while the second, an article from the Harvard Business School, highlights the importance of breaks: "To Strengthen Your Attention: Stop Overtaxing It." Though nearly 250 years separate the *Rambler* and *Idler* from such articles, the debates and social concerns reverberate. The friction Johnson's essays reveal between cognitive control and distraction becomes condensed into the span of Google's (rarely passed) first page. Built around a search engine that economizes information overload—accounting for short attention span in its algorithms—Google models the ongoing impact of Johnson's rhetorical strategy: leveraging distraction (and aggregate patterns of attention) to economize focus in a digital age.

Lapses of Concentration

Distracted Vigilance and the Female Mind

Not until the end of the century would the phrase "to stand at attention" be introduced into standard military jargon. Both the *Rules and Regulations for Formations of His Majesty's Forces* and *Rules & Regulations Cavalry* from 1792 use "*Attention*" to command soldiers to fall in line and assume a posture of vigilance: "On the word, *Attention*, the hands are to fall smartly down the outside of the thighs; the right heel to be brought up in a line with the left."[1] The soldier's carriage was meant to inspire a strict focus; his mind, like his body, was to stand ready for any sign of enemy troops or rival fire:

> The rules will be found few, simple, and adapted to the understanding, and comprehension, of every individual:—but they will require perfect attention in all ranks:—In the soldier, an equal and cadenced march, acquired and confirmed by habit, independent of music, or sound:—In the officer, precision, and energy of command . . .
>
> The following motions of the firelock will be taught and practised as here set down, until each recruit is perfect in them; . . .
>
> Supporting arms.
> Carrying arms.
> Ordering, at eased arms.

Standing at ease.
Attention.
Shouldering.[2]

This rigorous physical discipline in concentration reflected the immense perceived difficulty of training the everyday conscript to remain "on one's guard."[3] As the tactic of switching out (or doubling) sentries suggests, for large swaths of history trusting a single man to maintain alertness has been considered not only a bad idea but poor strategy. With the Hanoverian kings' rising interest in monitoring army protocol, down to the minute details of a soldier's life, attention was increasingly regimented; in the 1718 *Rules of War*, Sophia Frey notes that "sleeping at or abandoning a post" was explicitly added to a list of noncapital crimes, carrying "penalties of corporal punishment or fines."[4] Yet in this policing of concentration for military men, falling out of line carried other costs; the capacity to sustain vigilance (i.e., to avoid falling "off one's guard") was cast as essential to protecting both one's troops and one's reputation. Humphrey Bland's *A treatise of military discipline* (1727) tells the story of an officer who, imagining he has "nothing to apprehend," fails to notice an ambush of about eighty men. His slip leads not only to a decimated regiment but to an utter loss of self-respect, the perceived destruction of his reputation, and his suicide: "The Disgrace of being surpriz'd and taken by a Handful of Men, lay so near his Heart, that it put an End to his Life."[5]

Metaphors of female virtue drew on a similarly militaristic discourse of standing guard. If chastity was to be defended with an arsenal of social and mental resources, the most crucial was attention; women needed to model—even surpass—the vigilance of a soldier. The Marquis of Halifax's warning to his daughter in *The Lady's New-years Gift* of 1688 reflects the requisite paranoia: "It is time now to lead you out of your *House* into the *World*. A Dangerous step; where your Vertue alone will not serve you, except it is attended with a great deal of *Prudence*: You must have *both* for your *Guard*, and not stir without them; the Enemy is abroad, and you are sure to be taken, if you are found stragling [*sic*]."[6] Coming out "into the *World*" means entering an environment fraught with perils that require a woman to "arm" herself before setting foot outside her door. By 1743, the conduct book *The lady's preceptor: Or, a letter to a young lady of distinction upon politeness* extended this vigilance to include rigorous self-examination—modernity's classic control via self-policing—and urged women to imagine their actions as though seen, panopticon-like, by an imaginary figure attending to their behavior: "Wherever you are," the author writes, "imagine . . . that your Behaviour is attentively scanned by [others] all the while, and this will oblige you to observe yourself, and to be constantly on your guard."[7] Anxiety about female sanctity may be about the physical, but a woman's tools for guard-

ing her body (and reputation) were cognitive. Chastity's first line of defense was the mind; lapsed vigilance risked an unaffordable breach.

Written around a coquettish heroine frequently caught off guard amid the diversions of London and its suitors, Haywood's *The History of Miss Betsy Thoughtless* (1751) reveals the powerful role literature played in the eighteenth-century theorization and destigmatization of lapsed environmental awareness. In one odd scene, Betsy runs into an acquaintance, Mr. Bloomacre, with two other rakes at a London graveyard. Delighted to find her "unattended," they divert the heroine with flattery, flirtation, and wit, inciting a barrage of paradigmatically thoughtless slips: "Between the three Miss Betsy was very agreeably entertained:—they went round from tomb and tomb, and the real characters, as well as epitaphs, some of which are flattering enough, afforded a variety of observations.—In fine, the conversation was so pleasing to Miss Betsy, that she never thought of going home till it grew too dark . . . so insensibly [did the] time glide on."[8] To go "round" and round among the tombs, in Haywood, sets the head spinning, both conversationally and otherwise; what follows is a cascade of things not noticed. Already distracted from the hour, the darkness, and her rising need to get home, the heroine fails to recognize the approaching storm, meteorological and sexual. "[Knowing] not how difficult it was to procure . . . a vehicle in Westminster" (157), Betsy ends up alone with three men at night as they take shelter from the deluge. To distract her from her danger, the rakes now concoct a tempest of banter, which peaks in a thinly veiled joke about "carry[ing her] home" that insinuates a *ménage-a-quatre*: "[W]hen [the storm] is a little abated," cries one, "we will take you in our arms by turns" (157). Miss Thoughtless, as we might expect, does not catch on. After her unexpected deliverance (a plot twist in which a young girl appears to draw her away) Betsy remains oblivious until her rescuer *ex machina* steps in for narrative exposition: an unknown viscount, having overheard a "plot for carrying her off in a hackney coach" (158), had his sister step in to save her. Still finding the idea of a designing Mr. Bloomacre "incongruous" (158), the heroine's perplexity gives the novel a tidy excuse to summarize the lapse of attention that drives the scene; his past behavior never led her "to suspect he had any dishonourable intentions" (159). According to conduct-book logic, Betsy's guard is "found straggling." Not only does she forget the enemy is always abroad; she forgets there is an enemy at all.

Such episodes, which fill *Betsy Thoughtless*, offer descriptions of *lapses of attention*—referred to in cognitive studies as "lapses of situational, or environmental awareness," "attentional neglect," "inattentional blindness," or "attentional blink." Often, as the graveyard scene suggests, multiple slips converge in one scene, layering one atop another to produce a textured representation of the distracted mind. In neuroscientific circles today, M. R. Endsley's definition of situational awareness is the most widely used: "the perception of elements in

the environment within a volume of time and space."[9] As a kind of attention, situational awareness is perhaps the most contextual, as well as the most mobile; it allows us to coordinate stimuli, prioritize and reprioritize objects in our environment, and choose the appropriate action, especially to avoid danger.[10] Lapses of awareness, by contrast, mark moments when we pay attention to the wrong thing at the wrong time. (For instance, when Betsy focuses on the conversation about epitaphs and fails to note the fading light and the changes in cloud cover, humidity, and air pressure that signal a storm.) Contemporary experiments suggest these slips are ever present; however, we are especially likely to lose dynamic situational awareness when cognitive "load [is] high"—that is, when we are asked to process many complex stimuli at once.[11] Lapses, as a kind of distraction, cannot be isolated from the surrounding world; Betsy's actions only become lapses in attention when they divert her from a goal (such as walking home) or put her at risk. They become visible as inattentional blindness only in relationship to her ever-changing environments, priorities, and stimuli.

Literature, Uri Margolin argues, "pay[s] disproportionate attention . . . to breakdowns or failures" of situational awareness, working to illuminate the overload inherent in being "constantly exposed to a flow of external sensory stimuli . . . a rapid alternation of unprocessed sights, sounds, and smells." One option, he claims, is to represent moments of "perceptual system shutdown or crash, where the mind is overwhelmed by too many sense impressions all at once, . . . and is unable to process them in terms of selection and coordination." Another is to claim a character "suffering from absent mindedness [or] inattentional blindness" who, "being too preoccupied with internal objects of thought . . . miss[es] out on or skip[s] over objects in front of [his or her] eyes."[12] Haywood's *Betsy Thoughtless* combines the two to represent their interplay: the absentminded character who, rather than being preoccupied with internal thoughts, is overwhelmed by external stimuli; her mind is both the cause of perceptual distortion (what leads her to "miss out or skip over" objects) and the product of concatenated stimuli (the too-muchness of sights, sounds, and smells) in her environment. This instant marks not simply literature's interest in narrative experiments with representing lapsed cognition but a specific point of intersection in the history of the novel and the history of mind.

Traditional eighteenth-century theorists discussed environmental perception and its slips in terms of watchfulness, vigilance, and heedful awareness—the mind on guard. Because it involves sustaining consciousness of many aspects of our environment simultaneously, however, lapsed concentration became a favorite example for writers hoping to demonstrate attention's multiplicity. For Gottfried Leibniz, the multisensory nature of environmental awareness becomes a case for the inherently (if unconsciously) multifocal nature of attention and perception: "Bear in mind that we do think of many things all at once . . . ,

but something like it can be observed during every day of our waking lives. For there are always objects which strike our eyes and ears, and therefore touch our souls as well, without our [consciously] paying heed to them."[13] Even Johnson associates vigilance with multiplicity. His *Dictionary*'s definition of vigilance as "watchfulness; circumspection; incessant care," leads us to the multiplicity of "CIRCUMSPECT. adj. Cautious; attentive to every thing; watchful on all sides."[14] Yet as these definitions imagine an all-encompassing vigilance of sight, they also cue the inevitability of human failure: not even Argus, the hundred-eyed watcher of Greek mythology, could remain awake—or "watchful on all sides"—in the face of Hermes's trickery.

Eliza Haywood's prolific amatory fiction, whose repeated thematization of female desire earned her the name the "Great Arbitress of Passion," invites us to focus on moments when watchfulness lapses into distraction.[15] If there is one thing a Haywood novel will almost certainly include, it is a heroine whose guard slips at the brink of sexual danger. The heroine of *Fantomina* fails to notice the erotic danger of dressing as a prostitute and, finding "herself involv'd in a Difficulty [with a gentleman], which before never enter'd into her Head," ends up sexually undone, pregnant, and exiled to a convent.[16] *Betsy Thoughtless*, Haywood's penultimate novel, stands out as a narrative masterpiece of inattention. As we have seen, the novel's heroine (and its third-person center of consciousness) is perpetually losing situational awareness and, by some "inconsiderate action" (69), missing a clue that should alert her to a forthcoming advance. Conveniently, Miss Thoughtless is always *most* distracted at the moment when a young man attempts to compromise her virtue, which allows a parade of scenes in which the heroine almost-but-not-quite loses her virginity. Though she is always innocent and rescued just in the nick of time, Miss Betsy's heedlessness and her habit of courting multiple men at once drives away the aptly named Mr. Trueworth, whose love she regains only at the novel's end. In exploring Betsy's coquettish mind—and developing narrative structures to manage an inattentive point of view (as well as the inconstancies of a distracted readership)—Haywood's novel represents slips of situational awareness as an inevitable, yet forgivable, response to multiplicity and cognitive overload. Even as it illuminates distraction's sexual and social costs, *Betsy Thoughtless* resists presenting vigilance as the only signifier of female virtue; situation dependent, inattention becomes a sign of vexed innocence. Distraction, in Haywood, is less a vice than a trait associated with vivacious heedlessness, inadvertent error, and *gaité du coeur*. Rewriting the period's gendering of concentration, Haywood's work points toward the role literature played in the Enlightenment theorization of urban diversion and its impact on cognition, the precariousness of situational awareness in the face of multiplicity, and attention's function as a bridge between environment and mind.

Environment and Mind: Urban Diversion and the Distracted Brain

Haywood's novel begins with an eighteenth-century plot starter so familiar we should have it by heart. The newly orphaned Miss Betsy is sent from her country home in "L——e" to live in London, whose entertainments produce extravagant expectations that distract her from the pain of parental loss. The eighteenth-century city, historian John Plumb notes, was a breeding ground for diversions, filled with numerous "exhibitions of curiosities; museums; zoos; puppet shows; circuses; lectures on science; panoramas of European cities; automata; horseless carriages; even human and animal monstrosities."[17] If the heroine expects to find eternal delight in the urbane, most eighteenth-century writers railed against its cognitive costs. According to the mock-pastoral logic of Swift's "Description of the Morning," such a move meant replacing the quiet mornings of country life with urban hubbub: the sleeper wakes, not to bleating sheep, but to street cries that crescendo until "Brickdust *Moll* had scream'd through half the Street" (line 14).[18] To explain how such stimuli could oversaturate the mind, Maria Edgeworth imagines a group of Native Americans on a visit to London; their first walk "through the [city] streets" leaves them overwhelmed and exhausted. Sitting with "their faces between their hands," the only words they can speak are "Too much smoke—too much noise—too much houses—too much men—too much every thing!"[19]

In *Betsy Thoughtless*, London is to blame for the heroine's flightiness: her head is "turned . . . amidst the giddy whirl" (37). As she enters the household of her new guardians, Mr. Goodson and Lady Mellasin, Miss Thoughtless gushes; the narrative splits between her naiveté and the ironic register of the omniscient narrator:

> Miss Betsy thought she had the highest reason to be satisfied with her situation, and how, indeed, could it be otherwise? . . . Never did the mistress of a private family indulge herself, and those about her, with such a continual round of publick diversions. The court, the play, the ball, and opera, with giving and receiving visits, engrossed all the time could be spared from the toilet. It cannot, therefore, seem strange, that Miss Betsy, to whom all these things were entirely new, should have her head turned with the promiscuous enjoyment. (36–37)

At first, Miss Thoughtless seems a perfect case of distraction as *aptronym* (a Greek-Latin hybrid best translated as "apt name"), taking on "a name regarded as (humorously) appropriate to a person's . . . characteristics."[20] Though her name might make her seem the embodiment of cognitive vacuity—emblematizing Pope's misogynist aphorism "Most Women have no Characters at all"—Haywood's thoughtless heroine is far from empty-headed.[21] Instead, her mind is too full: full, that is, of everything besides the thing she "should" be focusing on. If Pope's pun on the double meaning of "character" as personality as well as

grapheme imagines that women's softer brains retain no mark, or inscription, of their lives, Haywood emphasizes the female mind's overabundance. Though certainly "thoughtless" in the Johnsonian sense ("negligent; careless" and "inattentive"), Betsy's distraction does not reveal a decrease in her total repository of thought. Instead, exposure to the "promiscuous enjoyment[s]" of the "court, the play, the ball, and opera" accustom her to a habit of thinking too many things at once.

At one level, this is Lockean impressionism, the Enlightenment notion that ideas emerge out of sensory impressions from the surrounding world. According to his *Essay Concerning Human Understanding*, "All that are born into the World being surrounded with Bodies, that perpetually and diversely affect them, variety of *Ideas*, whether care be taken of it or no, are imprinted on the Minds of Children. *Light*, and *Colours*, are busie at hand every where, when the Eye is but open; *Sounds*, and some *tangible Qualities* fail not to solicite their proper Senses, and force an entrance to the Mind."[22] Haywood's heroine enters London at the perfect age to be cognitively shaped by her environs: "just entering into her fourteenth year,—a nice and delicate time, in persons of her sex; [when] they are most apt to take the bent of impression, which . . . makes, or mars, the future prospect of their lives" (36). Yet Haywood resists the impulse of Steele's *Tatler*, which imagines a virtual dissection of the female brain to reveal the environmental luxuries that have "force[d] an entrance": "Were the Minds of the Sex laid open, we should find the chief Idea in one to be a Tippet; in another a Muff, in a third a Fan, and in a fourth a Fardingal."[23] If, in this conceit, objects literally penetrate (and occupy) women's minds, *Betsy Thoughtless* offers a subtler vision of environment and cognition; the heroine's mind is defined not by the kind of objects that surround it but by their multiplicity, as well as the swiftness with which they move through her world.

As one might expect, having one's "bent" shaped by a barrage of London stimuli was not thought to bode well. Going from country to city, readers knew, could lead the young into prostitution; for a female orphan, this warning had become cliché. Hogarth's *The Harlot's Progress* crystallizes the cultural logic that imagined the first inattentive step into London as a slip toward destruction. We find Moll Hackabout just off the coach, eyes modestly lowered. Her modestly downcast gaze signifies the moment of obliviousness that leads to her sexual fall. Not noticing the woman's clear marks of syphilis (or the caricature of Elizabeth Needham, a famous brothel keeper), Moll is lured into prostitution, a tumble foreshadowed by the falling pots at the left of the engraving.

Novels from John Cleland's *Memoirs of a Woman of Pleasure* (1748–49) to Susannah Rowson's *Reuben and Rachel* (1798) describe the city's effect as part of a trope of the "turning head" that paired mental processes with physical analogues. The mind turns; the head turns with it. In Cleland, a friend diverts

Innocence Betrayed, or the Journey to London. The first of six engravings in William Hogarth's *The Harlot's Progress* (1732) depicts young Moll Hackabout's unintentional fall into prostitution. HIP / Art Resource, New York.

Fanny Hill with ever-multiplying tales of urban delight, "piquing my childish curiosity with the fine sights that were to be seen in *London*; the Tombs, the Lions, the King, the Royal Family, the fine Plays and *Operies*, and in short all the diversions which fell within her sphere of life to come at; the detail of all which perfectly turn'd the little head of me."[24] If Fanny's head turns at the mere mention of London diversions, Rowson's novel shows how its overload could leave the uninitiated spinning: "Unaccustomed to travelling, [Rachel] was greatly fatigued; and when she entered the busy streets of London, the noise, confusion and hurry made her head giddy; the disagreeable effluvia too, which assailed her olfactory nerves as she alighted from the coach in a very close lane in the city, turned her extremely sick, and she would have fallen, had not a spruce young man, who was waiting for another coach to arrive, caught her by the arm, and led her into the house."[25] Here too, we find accumulating multiplicity ("noise, confusion and hurry") translated into a full-fledged grammar of distraction, linking lapses of environmental awareness to vertigo—a head-spinning giddiness that could leave one in the arms of unknown men.

As Emily Cockayne notes in *Hubbub*, "individuals reacted to experiences as beings-in-the-environment, not as detached observers. . . . There was no separation between the perceiver and his or her milieu; people absorbed the world with their (functioning) senses, and they inhabited that environment at the same time."[26] Multisensory perception lay at the heart of environmental awareness. Therefore, an overstimulating environment was believed to put the mind at risk. According to vegetarian physician Thomas Tryon, a healthy body was one neither "defiled nor adulterated by Intemperance, Uncleanness and Disorders." This meant abstaining from certain "Meats, Drinks Employments [and] Communications," avoiding "gross stinking Foggs, Scents and Vapours,"[27] and refusing to gaze upon "pollut[ing]" entertainments like puppet shows and balls—all "Sights [with] an innate Power to impress their [dangerous] signatures."[28] For traditionalists, attention's role in a chaotic environment was to *notice* the potential for corrupting stimuli and to filter them out, blocking their entrance into the mind. Cockayne highlights an intersection between theories of the senses and theories of attention: "In the early modern period the sensory organs were commonly considered to be active. . . . [P]eople regarded ears, eyes, noses, tongues and fingers themselves as the barriers and controllers of sensory input and the initial location of sensory interpretation. Although there was increasing recognition among the natural philosophers that the senses merely channeled sensations to the brain, old views prevailed. Some sensory experiences were thought to cause emotional damage; the senses stood guard against injurious things."[29] As Tryon succinctly put it, "each Sense hath a Gate, which it can open or shut as it pleases."[30] Attention meant not only sustaining awareness of one's surroundings to avoid danger but standing guard, or "gating," against the entrance of perceptions and sensations that could shape the brain to its detriment.

A conversation between Miss Betsy and Lady Trusty reveals how poorly "gated" the heroine's mind has been against urban delights. Responding to "extravagant encomiums on . . . various amusements," in which Betsy equates country living to being "buried alive," Lady Trusty echoes the Marquis of Halifax's metaphors of sexual vigilance (57). Though London is "indeed, a very agreeable place to live" with "elegant" pleasures, the older woman warns that "the too frequent repetition of them, may so much engross the mind, as to take it off from other objects, which ought to have their share in it: besides, . . . there are but too frequent proofs, that an innate principle of virtue is not always a sufficient guard against the many snares laid for it, under the shew of innocent pleasures, by wicked and designing persons of both sexes" (57–58). By accustoming the mind to diversion, living in the city could lead to lapsed concentration; even the virtuous were vulnerable to its "snares." Of the species of *divertissements*, amusements were seen as placing the least weight on the mind, defined in the *Encyclopédie* as a "light occupation of little importance, and that pleases"

(*Amusement* est une occupation légère de peu d'importance & qui plaît).[31] Yet cumulatively they had weight. Lady Trusty's warning thus reiterates an eighteenth-century truism; though amusement could allow attention to "unbend," excessive indulgence could permanently alter cognition. If Mary Astell worried in 1694 that women who focused on frivolities would develop minds "as light and frothy as those things they are conversant about,"[32] Halifax's *The Lady's New-years Gift* rendered this mind-body connection explicit: "The *Mind* like the *Body* is tired by being always in one Posture, too serious [a stretch] breaketh it, and too diverting loosenth it: . . . *Diversions* too frequently reaped, grow first to be indifferent, and at last tedious; whilst they are well chosen and well timed, they are never to be blamed; but when they are used to an Excess, though very *Innocent* at first, they often grow to be *Criminal*."[33] Diversion not only "turns" but loosens the strings of the mind. As attention tires and stimuli lose their novelty, the mind falls (like the unguarded woman) into the criminal.

The Problem of a Soft Female Mind

In *Of the Characters of Women*, Pope vows that woman at "best . . . but forms a softer Man" (line 272).[34] Building on the eighteenth-century trope of describing women's brains as literally soft, many theorists used this logic to suggest that female minds were more vulnerable to the pull and sway of diversion. In the poem's opening lines, "Nothing so true as what you once let fall, / 'Most Women have no Characters at all,'" Pope swiftly moves to the texture of the female brain, declaring their "Matter too soft a lasting mark to bear" (lines 1–3).[35] Later, such justifications would become the heart of sexist claims linking the supposedly soft female body to a soft female mind. In "The Naturalized Female Intellect," Lorraine Daston describes the views expressed by French physician and gender theorist Pierre Roussel in *Système physique et morale de la femme* (1775) as paradigmatic of the age. Roussel argued that

> not only the reproductive organs, but also the skeleton, ligaments, tissues, nerves, and vessels are "marked by the differences that display the functions to which woman is called, and the passive state to which nature destines her." Female organs are, Roussel claimed, soft, delicate, small, and elastic in comparison to those of the male, and from this fundamental distinction he read off all the clichés of feminine intellect and character. The mobility and sensitivity of her tender organs endow woman with the ability to seize at a glance "an infinity of nuances, of items of detail, and relationships that escape the most enlightened man." . . . [H]er good memory, mental agility, and animated conversation repair the omissions of the long studies her fragile frame cannot support without draining her "vital forces."[36]

In his *Progress de l'esprit humaine* (1795), physiologist Pierre Cabanis took this further, claiming (as one historian of women and disease puts it) that "sexual-

ity utterly shaped humanity's physical and mental experiences, marking men and women as radically different beings." He defined "the uterine system . . . [as the] centripetal force that governed the female organism . . . and extended throughout the whole body: the bones, the muscles, the fibres, and, especially, the brain and nervous tissue, which Cabanis characterized as soft and pulpy when contrasted to a man's [leaving them] unable to concentrate."[37] According to this sexualized biology of mind, women had "softer" brains than men and thus remained, in some aspects, "children all their lives."[38]

The malleability of the female mind, supposedly, had two consequences. First, the female brain's relative softness was imagined to yield a less powerful attention. Unable to resist its environment, it left women more receptive to impressions and less able to "concentrate" on "long studies."[39] Yet, as we saw in Pope, this "tender mold" that allowed corrupting influence to become so deeply inscribed in women's heads was also believed to make their minds less capable of sustaining impressions; their minds, like a sponge, would spring back. Despite the contradictions in this logic, eighteenth-century writers repeatedly invoked the malleable female mind to discuss the challenges that environmental influences posed to a woman's character and virtue. These problems left women (supposedly) more susceptible to distraction and thus at risk of being taken off guard, be it by a piece of gossip, a salacious novel, or the propositions of a rake.

The fluidity of the female brain, in *Betsy Thoughtless*, becomes both explanation and excuse for its heroine's focus problems, as well as a narrative engine of a more richly theorized thoughtlessness. Unlike Haywood's vapid Miss Airish, a minor character whose head is as vacant (and empty) as her air-headed name suggests, the heroine's mind is *capable* of substantial—or weighty—ideas but is too radically fluid to fixate for an extended period on any one. Summarizing Cartesian theories that linked environmental impression to the brain's wetness or dryness, Isaac Watts suggests that liquid-saturated cerebrums (i.e., those of women and children) had a different relationship to informational processing: "*In Children* [who] perceive and forget a hundred Things in an Hour; the Brain is so soft that it receives immediately all Impressions like Water or liquid Mud, and retains scarce any of them: All the Traces, Forms or Images which are drawn there, are immediately effaced or closed up again, as though you wrote with your Finger on the Surface of a River or on a Vessel of Oil."[40] Betsy's natural strengths of vivacity, intelligence, and wit—all forms of cognitive fluidity—cannot stabilize her environment: "She had a great deal of wit, but was too volatile for reflection, and as a ship, without sufficient ballast, is tossed about at the pleasure of every wind that blows, so was she hurried thro' the ocean of life, just as each predominant passion directed" (31–32). With a brain like an unballasted ship, Betsy's concentration shifts with every passing stimulus. This attentional liquidity—a mind able to admit impressions but often unable to

retain them—supports the conceit of short attention span, manifested in an ability to forget things immediately after they occur. When a suitor is blocked from writing her, Miss Betsy's disappointment is short lived; when his letter arrives a few sentences later, however, Miss Thoughtless is "surprized . . . having never thought of him since they parted" (46). Quick turns reflect the springlike nature and spontaneity of Betsy's character as well as her imperviousness to experience; to return to Isaac Watts's *The Improvement of the Mind*, stimuli "vanish like a *Rhapsody* of Evening Tales, or the Shadows of a Cloud flying over a green Field."[41] Lacking a central, stabilizing weight, a flighty mind, like an unballasted ship, cannot convert leeward force into purposeful motion; its direction is determined by the winds and waves. More important, it cannot reliably remain upright; vulnerable to pressure from any side, its mast—representing both virtue and vigilance—is at risk of toppling and the sailor on lookout of being "tossed." According to James Fordyce's *Sermons to Young Women* (1766), a young woman's safety from the libertine "lies in retreat and vigilance";[42] innocent as she may be, Betsy, like Eve, is in danger of postlapsarian fall.

Sex, Environment, and the Multifocal Coquette

The eighteenth-century model of situational attention may have been the soldier, but the character type for thinking through its lapses was the coquette, a category Miss Thoughtless is carefully crafted to fit. Women needed to maintain constant awareness to protect their virtue; the coquette—distracted by lovers, diversions, and goods—was intrinsically vulnerable.[43] Famed for encouraging multiple suitors, she became a figure for the pressures laid on attention in an urban landscape—what Theresa Braunschneider calls the "capacious desire" of consumer culture.[44] Unlike the women satirized in Steele, whose heads reveal a single object consuming them entirely, the coquette embodies the desire for multiplicity: "Offered an array of appealing options—of luxury goods, public entertainments, pets, clothes, or lovers," Braunschneider explains, "the coquette chooses them all."[45] Always multitasking and habituated to moving erratically among objects of interest, these inattentive heroines allowed authors not only to explore the sexual politics of vigilance and distraction but also to integrate traditional and modern theories of concentration around a model of attention that emphasizes environment.

The coquette's defining feature, Sandro Jung observes, was taking "delight in the attention that male admirers pay her, without any intention . . . to reciprocate this attention earnestly, that is, through marriage."[46] In crafting Betsy Thoughtless as a distracted but virtuous flirt, Haywood gives this problem of romantic focus a cognitive twist.[47] The heroine enjoys being courted by multiple men at once; her list of admirers in the novel thus includes a Mr. Gayland, a Mr. Savings, an Oxford gentleman, a Mr. Trueworth, a Mr. Staple, a Captain

Hysom, a Mr. Bloomacre and two men, an unknown rake, a Mr. Munden, a Lord Frederick Fineer, and a Mr. W——. This attraction to multiplicity becomes a comic set piece as Miss Thoughtless, having just received a love letter from Trueworth, tries to juggle the attentions of three suitors without alienating any:

> As much as she was pleased with the respectful passion of Mr. Trueworth, she could not find it in her heart to think of parting with the assiduities of Mr. Staple, nor even the blunt addresses of Captain Hysom. . . . These [other] two lovers came to the door at the same time, and Mr. Staple saying to the footman that opened the door, that he was come to wait on Miss Betsy,—"I wish to speak with that young gentlewoman too," cried the captain, "if she be at leisure:—tell her my name is Hysom." (138–39)

Doubled (even tripled) in their overlapping addresses, suitors embody the crowding of Betsy's mind. Three men at once are the most the heroine actually manages, but her head is full of suitors: she was "far from thinking it a fault . . . to hear the proposals of a hundred" (125). Imaginatively polyamorous, this style of courtship becomes a mark of her increasing distraction, the product of a multifocal mind perpetually multiplied.

This hubbub of courtship incites the classic mistake of the coquette. In sustaining the attentions of many men, she misses the one of true marital worth: the hero slips from her mind. Trueworth's concerns about Betsy's focus, culminating in an argument in which he finds himself "shocked at the impossibility . . . of engaging her attention" (233), point toward two platitudes for men on the eighteenth-century marriage market. First, coquettish behavior in courtship suggested a character flaw that could make them miserable. Thus John Moir's warning: "[A] man [cannot have] a greater plague than a wife, on whose attention he has no dependence. He may as well correct her in her size, or her shape, the cast of her face, or the tone of her voice, as in a temper, which it is not in her power to remedy or improve."[48] Still worse, the coquette's multifocal mind meant that the work of sustaining a monogamous relationship fell on the husband alone. According to *A Dictionary of Love: Or the Language of Gallantry Explained*, the "Caprice" of multiplying suitors was deployed "politically in love, to attach their lover the stronger," requiring him to redouble his guard "shewing him, that if he does not employ all his attention to keep her fixed, she may give him the slip."[49] Such a wife might be not only a disinterested or coldhearted partner but also a drain on attentional resources—one that could continue for the rest of his life. Thus the warning of Trueworth's aunt: "[T]he want of solidity in a wife was one of the worst misfortunes that could attend a marriage-state;—that the external beauties of the person could not atone for the internal defects of the mind;—that a too great gaiety du coeur, frequently led

women into errors without their designing to be guilty of them; and conjured him to consider well before the irrevocable words, 'I take you for better and for worse' " (224). Distraction, like love, could be forever.

The Challenges of Situational Awareness

The first line of *Betsy Thoughtless* announces its premise: "It was always my opinion, that . . . those mistakes the sex are sometimes guilty of, proceed, for the most part, rather from inadvertency, than a vicious inclination" (27). The idea of the mistake, the distracted slip, excuses the otherwise unacceptable for the heroine, the narrator, and the reader. Charles Allen's *The polite lady: or a course of female education* (1760) embodies the conservative logic Haywood fights. Allen claims "absence of thought" arises from an intrinsic character defect: "[T]his habit of inattention . . . proceeds from a constitutional weakness, . . . which can never fix, for ten minutes, upon the same object, but must be always fluttering from one trifle to another. . . . To confine her attention to the same subject, or to make her thoughts run in the same channel for a quarter of an hour together, would be a kind of imprisonment which she could not bear."[50] Moir holds the coquette culpable for her supposed flaws. Blaming negligence on "habits of substituting giddiness for gravity, or levity for thought," he concludes: "There is nothing for which we are more strictly and properly responsible, than our thoughts and attentions. . . . A woman cannot have a greater misfortune, than a mind thus defective."[51]

It should come as no surprise, then, that Haywood, a novelist described by Paula Backsheider as "the most active experimenter with fictional forms . . . of her generation," refused to "punish 'fallen' women in traditional ways," rejecting an easy explanation of the source of her heroine's thoughtlessness or of women's supposed susceptibility to (or culpability for) distraction.[52] Betsy's name implies it has been with her from birth—possibly, as her brother Francis Thoughtless's impetuosity suggests, a family inheritance. Yet the narrative complicates even this suggestion of a predisposition to diversion by repeatedly casting her slips as the product of her surroundings—imprinted based on her youth, sex, and situation. *Betsy Thoughtless* imagines an inattentive innocence that develops from an ongoing interplay between mind and world. The supposed malleability of the female mind becomes a way to emphasize environment's impact on attention, drawing blame away from female character; lapses are inevitable—particularly amid the cacophony of urban London.

Patricia Spacks identifies obliviousness as the defining quality of Haywood's heroines, whose inability to "wake up" at the moment of seduction enacts "a vision of irresponsibility [that can express] female sexuality without being subject to judgment."[53] In *Betsy Thoughtless*, this coquette becomes the vexed epitome of

sexually vivacious absentmindedness. As slips accumulate, putting the heroine's virginity at risk, blameless caprice becomes harder to uphold; Miss Thoughtless must remain innocent in the reader's judgment through nine seduction attempts—in mind as well as in body.[54] To protect the conceit of Betsy's virtue as she narrates sexual attempts upon it, Haywood needs us to believe in the artlessness of the heroine's errors. To wit, Haywood needs distraction.

Betsy Thoughtless suggests the heroine is diverted, not by a single thing, but by an environment that is dizzyingly plural. The most powerful excuse for her thoughtlessness works at the level of the sentence, a narrative pattern for stockpiling stimuli around lapsing characters in fragments that points toward the first principle of Haywood's grammar of distraction: the multiplicity required for situational awareness can also break it. As the novel piles events around Betsy, scenes take on a broken, additive grammar, straining syntactic comprehensibility to accommodate the irrelevancies that fill her attention. This excess—the formal equivalent of a *ménage-a-quatre*—becomes distraction's literary pardon, a mimesis of too-muchness that threatens to overwhelm both narrator and reader.

The story of Erminia and her brother at a masquerade, an essay-length tale in Haywood's periodical, *The Female Spectator* (1744–46), crystallizes this grammar's elements in miniature. The brother's promise to keep watch over his sister is quickly forgotten, as is she: as soon as they enter, both are "bewilder'd amidst the promiscuous Assembly,—the strange Habits,—the Hurry,—the Confusion quite distracted their attention."[55] Erminia mistakes a masked man for her brother and begs him to take her home, an error that the rake repays by way of rape. Refusing to rely on readers' knowledge of the London masquerade—that site of "carnival," "hubbub," and "saturnalian cacophony"—to assure Erminia's innocence, the story replicates the process of cognitive overload.[56] A dash punctuates the entrance of each thing that crowds and overtaxes the siblings' minds ("—the strange Habits,—the Hurry,—the Confusion"), until their attention is overwhelmed, vigilance lapses, and the sentence is done.

If Erminia slips (and suffers) by merely setting foot in a masquerade, Miss Thoughtless's careless virtue requires a new level of carefully narrated chaos. Rather than separating us from Betsy's experience, the narrative plunges into multiplicity: symbolically, sensorially, and syntactically. The heroine's lapses first explicitly risk sexual harm in *Betsy Thoughtless* on a trip to Oxford with Lady Mellasin's daughter, Miss Flora—a symbolic jaunt to see her brother motivated by the fact that the king's vacation has just put "an entire stop . . . to all public diversions" in London (66). It should be clear what's in store for Betsy when an "inconsiderate action" (69) separates her from the already deflowered Flora in an urban pleasure garden. Having been approached by two male students, Betsy and her companion weather a "saturnalian cacophony" meant to engage and

overwhelm every sense. Amid the furor, Betsy fails to notice that she has been left alone with the man, who makes a brute play of seduction:

> [B]etween singing, dancing, and laughing, . . . [the student] found means to draw Miss Flora out of the room. . . . [The gentleman-commoner] catched [Miss Betsy] in his arms. . . . [F]inding he was about to proceed to greater liberties than any man before had ever taken with her, . . . she struggled to get loose, and called Miss Flora, not knowing she was gone, to come to her assistance. . . . She was about to say something, but he stopped her mouth with kisses, and forced her to sit down in a chair, where holding her fast, her ruin had certainly been compleated, if a loud knocking at the door had not prevented him from prosecuting his design. (71–73)

The lapse that leaves Betsy at risk—not noticing Flora's exit—is the key to her innocence; oblivious to her danger, she tolerates the young man's banter a few moments too long, and cries for help a minute too late, "not knowing she was gone."

If this language seems dangerously close to rape culture, that's because it is. Most eighteenth-century readers blamed Betsy and Flora far earlier: when they "readily granted" the two men "leave to attend them"; "consented to be conducted" to a grove "without the least scruple or hesitation"; and only lightly repulse kisses at the grotto, not giving "themselves the trouble to reflect what consequences might possibly attend [such] a prelude" (69–70). Yet this vision of straggling vigilance works alongside—indeed, can only be articulated through—the scene's grammar of distraction, which draws us to the environmental array around Betsy's slip. The "singing, dancing, and laughing," *Betsy Thoughtless*'s equivalent to the *Female Spectator*'s "—the strange Habits,—the Hurry,—the Confusion," takes on the cumulative power of cognitive overload, now granted more active verbs and more diabolical authors.

Sustained situational awareness, cognitive scientists note, requires multilayered cognition. By way of example, Johnson and Proctor urge us to imagine a crowded city street—say, Times Square on New Year's Eve: "everything around you is changing every minute. Objects come in and out of view. People jostle for position around you. You try to keep your goal in mind as you avoid obstacles, look for breaks, and maneuver for position."[57] Yet the case that illustrates this kind of attention also illuminates its challenges; studies show that situational awareness is likely to suffer precisely in situations like these: "when workload is so high that necessary information cannot be processed."[58] Masters of diversion, Haywood's rakes know how to exploit multisensory awareness to yield cognitive overload. Multiplying environmental stimuli, they produce a sensory cacophony so layered that a slip becomes inevitable. In a setting saturated with sight and smell—the window offering a "whole prospect of the garden" (visual) surrounded by "jessamin and honeysuckles" (olfactory)—they bring in a round of gustatory delights ("wines, cakes, jellies") before tackling the rest (auditory,

tactile, kinesthetic, proprioceptive) with "singing, dancing, and laughing" (70–71). Rather than producing the multisensory effect Gabrielle Starr describes as "centrally important to aesthetic pleasures," they glut the senses: synesthesia impedes environmental processing.[59]

Even now, a sexual slip cannot be narrated alone, only surrounded by list-filled clauses, yoking the heroine's inattention to the events that overwhelm her. Simply describing the gentleman-commoner's mélange of dances crowds mind and paragraph: "every limb must be in motion,—every faculty employed. The gentleman-commoner took Miss Betsy's hand, and led her some steps of a minuette, then fell into a rigadoon, and then into the louvre, and so ran through all the school-dances, without regularly beginning or ending any one of them, or the tunes he sung; the young student was not less alert with Miss Flora; so that between singing, dancing, and laughing, they all grew extremely warm" (71). As he leads her through this dizzying lineup—a few small, reserved "steps" in the minuet's three-quarter time, hopping into the duple meter of a folk "rigadoon," switching abruptly into slow gigue with the louvre's dotted rhythms—the narrative begins to mirror his eccentric shifts of tempo. Sentences, like the dances, have no clear start or finish. Tortuous syntax models the cognitive turning of her head, with semicolons, commas, and disordered lists reflecting the difficulty of switching between cadences. Ordering events amid this haphazard mix is compounded by problems of grammatical priority that add to cognitive load by making it harder to sort this syntactic jumble. Without closure—not only between dances themselves, but also among the events: the dances, the tunes, the laughter and the incongruous improvisations—we, like she, begin to go round and round. Distraction, grammatically rendered, offers a justification for inadvertency in the face of overload; the reader begins to slip as well.

Philosophizing Multiplicity: Cognitive Bottlenecks and Sorting Gloves

Such scenes in *Betsy Thoughtless* take up an argument in eighteenth-century discussions of situational awareness: how can the mind successfully manage multiplicity? When, and under what conditions, does it fail? Traditional Enlightenment models of attention blamed slips of awareness on engaging too many objects at once. If attention meant concentrating on one thing—or at least one thing at a time—taking in many risked a flawed awareness. The visual metaphor reigned: "If one tries to look at too many objects at one glance, one sees none of them distinctly," declared Descartes in 1684. "Likewise, if one is inclined to attend to many things at the same time in a single act of thought, one does so with a confused mind."[60] Isaac Watts's *Logick: Or, The Right Use of Reason* (1724) takes this idea to its logical conclusion, blaming lapses on the overload produced by any multifocal cognition. A "Multitude of Thoughts," he contends, should not cluster but be "so distinctly ranged . . . that the Mind may

not be overwhelm'd with a confus'd Attention to them all at once."[61] Multiplicity, in this case, is the antithesis of attention.

The idea of situational awareness, invoked by multifocal theorists, challenged this premise. To notice potential danger on multiple fronts required an attention broad enough to accommodate multiplicity. What then? Even multifocal thinkers such as Leibniz who claimed we can "think of many things all at once" understood that attention had limits. Our minds are not infinitely capacious: we "pay heed only to the thoughts that stand out most distinctly." Gaps are thus inevitable; "if we were to take note of everything, we should have to direct our attention on an infinity of things at the same time." According to this model, we *do* absorb the objects striking our "eyes and ears"; yet this cacophony predisposes our minds to partial environmental recall.[62] Lapses of concentration are not a problem of focusing on too much, as in Watts, but a natural part of conscious life.

Eighteenth-century philosophers here pose a set of problems that continue to vex neuroscientific theories of attention: how much environmental information can be processed simultaneously? When, and how, do we gate it—and what determines what gets through? In 1958, Donald Broadbent conducted a now-famous experiment on auditory attention. In a variation on what's now called the *dichotic listening paradigm*, he presented subjects with two streams of sound, one in each ear, and asked them to focus on one, trying to remember what they heard in the "attended" channel and disregarding information from the other. His results, which suggested that subjects remembered information from the attended ear (and showed impoverished recall from the unattended channel), led Broadbent to propose that there was a *filter* on attention: the "nervous system acts as a single communication channel of limited capacity . . . and only sensory events that have some physical feature in common . . . are selected to pass into the limited capacity processing system."[63] In this model, known as "*early-selection theory*," the mind prioritizes certain stimuli over others for deep processing early on and filters the rest to avoid a cognitive bottleneck, leaving much of our surroundings unprocessed. The problem with this idea, as it happened, was that it couldn't account for phenomena such as "the cocktail party effect"—our ability to pick up on the sound of our name, or an unexpectedly intriguing comment, in a dense crowd. The fact that these supposedly unattended stimuli were entering memory became the foundation for a revision of the Broadbent theory, proposed by Deutsch and Deutsch in 1963. They claimed that attention could in fact accommodate all environmental stimuli in parallel. In what would become known as "*late-selection theory*," they suggested that the filter, or cognitive bottleneck, occurred later; preventing some stimuli from being encoded into memory.[64]

For an eighteenth-century predecessor to early-selection theory, we can think back to Tryon's "gate," which, when recognizing danger, has the power to shut,

taking in the good and keeping out the bad. For late-selection theory, we can look to Leibniz, who suggests we take in an abundance of particulars before we narrow in on "relevant" stimuli for processing. In both models, acknowledging attention's limits meant emphasizing cognitive organization—how the mind filters and prioritizes stimuli. In the traditional model, the question was how to select one object of focus out of a multitude; in the modern, it was how to cognitively manage the many in a dynamic environment.

Dugald Stewart's *Elements of the Philosophy of the Human Mind* likens management of multiplicity to the management of a shop's inventory, a haberdashery's as it happens. He tells the story of a shop boy who needs to organize diverse goods. If the boy tries to look at all of the different gloves, stockings, shoes, and hats in the warehouse simultaneously, his "attention"—like that of Haywood's heroine—will be "bewildered among an infinitude of particulars," leaving him facing a disorganized shop.[65] In a properly functioning mind, Stewart contends, our desire for order instead leads us to "distribut[e]" the manifold impressions in our world (the overwhelming abundance of garments) into "separate heaps or collections."[66] This variation of the classic warehouse model of mind imagines that "In one parcel (for example) he collects and incloses under one common *envelope*, all his *gloves* of a particular size and quality; in another, all his *gloves* of a different size and quality; and, in like manner, he proceeds with stockings, shoes, hats, and the various other commodities with which his warehouse is filled. By this means, the attention . . . is confined to *parcels* or *assortments* of particulars; of each of which parcels a distinct idea may be obtained from an examination of any one of the individual [objects] contained in it."[67] Boxed up, the "multitude of units" no longer "distract his attention, and burden his memory" as they would if laid out individually. We solve the problem of multiplicity when we sort it into parseable elements.[68]

Betsy Thoughtless rewrites this problem to remind us of the environment's power to disrupt our ability to organize (and attend to) pertinent elements of our surroundings. Facing a surplus of diversions, Betsy's mind is much like that of the confused apprentice in Stewart's disorganized warehouse. Unable to prioritize, or chunk, the stimuli around her—that is, to see that the singing, dancing, and laughing fit into one "box" of attempted seduction—she fails to notice her friend's exit. Yet at least two things separate her from the shop boy. First, Stewart's metaphor imagines a static environment; the gloves, scarves, hats, and shoes aren't moving, nor do they suddenly become animated to fly about in a phantasmagoric whirl of minuets and reels. Second, both warehouse and shop boy are imagined to be stable. Stewart's storehouse has precise, unchanging dimensions. No earthquakes hit it in the middle of the sorting task; the boy can stay grounded on two feet.

Betsy, by contrast—and herein lies Haywood's central contribution—has a mind and surroundings in flux; *Betsy Thoughtless* takes the philosophical ele-

ments of Stewart's parable and places them in real time. When the heroine's awareness lapses, the gloves, hats, and scarves of Stewart's *Philosophy of Mind* are translated into active agents, capable of responding to (and provoking) dynamic events. Unlike Stewart's grounded shop, Betsy's mind is like a ship without ballast. No longer gloves to be sorted, stimuli are waves that push the heroine to and fro, upending both boxes and ship, as if the shop boy had to navigate a warehouse turned funhouse as his environment changes underfoot, catching accessories in a whirligig dance; if this weren't bad enough, he also has vertigo.

Surreal as this sounds, it comes closer to describing the problems multiplicity poses to situational awareness. In real time, the challenges of multiplicity multiply, an effect whose argument emerges in the narrative's mis-en-scène. Enlightenment arguments about lapsed vigilance and female virtue combine in *Betsy Thoughtless* to theorize situational awareness as an act of parallel processing. Rather than remaining separate, moreover, the challenges of simultaneously noticing details in one's environment and organizing them in the mind to avoid becoming overwhelmed by them here intertwine, articulating a reciprocal relationship. The distracted grammar developed to narrate her heroine's lapses, in Haywood, begins to describe something close to neural plasticity, exploring an ongoing rhizomatic relationship between environment and mind. Refusing to embrace "a structure . . . defined by a set of points and positions, with binary relations between the points and biunivocal relationships between the positions," this portrayal of intersections among stimuli and cognition claims the rhizome's ability to connect "any point to any other point." "Always . . . reversible, modifiable [with] multiple entryways and exits and its own lines of flight," distraction, as mental assemblage, models the multiplicity of environmental cognition at the level of deep structure, "an acentered, nonhierarchical [literary] system" that mirrors the flexibility of Betsy's mind.[69]

Thus the final difference between Betsy and the shop boy: in Stewart, the apprentice's mind is not molded by the objects it engages; in Haywood, environmental attention transforms cognition. The multiplicity around Betsy creates habits of disorganization that shape and overload her mind; this, in turn, influences her ability to focus on her surroundings. The attention required to remain on guard in the city risks mimicking its nature, a protean style of cognition that will determine what, when, and how much of the environment will be imprinted—and reimprinted—on it. Repeat ad infinitum.

Strained Omniscience and the Distracted Heroine

Yet here we must pause. Infinitely? Can scenes of sexual inattention, in fact, be endlessly repeated? With what consequences for narration—particularly narrative omniscience? Alain Robbe-Grillet enthusiastically describes the powers of an "omniscient, omnipresent narrator appearing everywhere at once, simulta-

neously seeing the inside and outside of things, following both the movements of a face and the impulses of conscience, knowing the present, the past, and the future of every enterprise."[70] A similar theme emerges in Dorrit Cohn's *Transparent Minds* when she discusses narrative techniques for presenting fictional consciousness: "[P]sycho-narration has almost unlimited temporal flexibility. It can as readily summarize an inner development over a long period of time as it can render the flow of successive thoughts and feelings, or expand and elaborate a mental instant. . . . [Any] perceptible hiatus between the narrator's and the character's idioms . . . point[s] in one direction: the narrator's superior knowledge of the character's inner life and his superior ability to present it and assess it."[71] Depicting slips of awareness in a novel focalized around a chronically inattentive character, however, points us—and theories of omniscience—in a different direction. At this moment in the history of the novel, the narrator's knowledge of a character's inner life cannot be actualized by superior representation; syntax cannot appear "everywhere at once."

Betsy Thoughtless, moreover, presents a case where attention cannot be extracted from context; the heroine's multiplicity of mind works in constant relationship to what Leibniz would call the "infinity" of environment. As Alan Palmer reminds us, the whole mind does not consist only of narrated thoughts but includes qualia, the feeling of multisensory existence. Consciousness encompasses nonlinguistic intuition, raw emotion, and unacknowledged desire, which coexist with the "experiences of the 'external' world such as sights, sounds, smells, slippery and scratchy feelings, feelings of heat and cold, and of the positions of our limbs."[72] Haywood's novel, with its seemingly stock heroine, reveals a narrative problem for all texts seeking to portray the fictional mind in full context. To render situational awareness in real detail and complexity does not yield a smooth integration of environmental context, but rather an overtaxed syntax that challenges narrative omniscience.

For eighteenth-century writers, what sprang to mind when thinking about omniscience was not a narrative technique for managing perspective; it was God. According to Locke, human cognition was marked by its limited processing capacity. Synchronous attention was divine: "The narrowness, that humane Minds are confin'd to here [is] of having great variety of *Ideas* only by succession, not all at once: the several degrees of Angels may probably have larger views, and some of them be endowed with capacities able to retain together, and constantly set before them, as in one Picture all their past knowledge at once. This, we may conceive, would be no small advantage to the knowledge of a thinking Man; if all his past thoughts, and reasonings could be always present to him."[73] For Stewart, God was a trump card for overcoming the unifocal constraints of the mind: "These ideas surely do not apply to the works of the Almighty. The multiplicity of his operations neither distracts his attention, nor exhausts his

power; nor can we . . . suppose him reduced to the necessity of economizing . . . the resources of Omnipotence."[74] Rhetorically speaking, the Almighty was a philosophical go-to for capturing the nigh-infinite simultaneity of situational awareness. God needed no boxes to manage a surplus of gloves; he could hold everything in his mind at once.

A distracted character's unreliable viewpoint strains narrative omniscience around this point of simultaneous attention, revealing a narrator whose powers fall somewhere between God's omnifocus and distracted human narrowness. An inattentive heroine, *Betsy Thoughtless* reveals, is a demanding third-person center of consciousness. Rather than a character "whose point of view orients the narrative perspective," as Gérard Genette would put it, the heroine disorients it;[75] her distraction renders her unable to fully register narrative events, particularly when facing dangers to which she must remain oblivious. Yet while Haywood's heroine needs to be repeatedly distracted from surrounding events, readers also need to follow the basic plot. Bridging the gap between Betsy's perspective and the third-person narrator produces a grammar of distraction capable of explaining—and compensating for—her slips.

To describe lapsed concentration, then, required enumerating the various events, stimuli, and distractions (gloves, hats, and scarves) that crowd a heroine's mind, as well as the things she does *not* notice, always assuring the reader that she does not notice them. This comprehensive (and self-negating) list of stimuli begins to strain omniscience. Even narrating the events at Oxford taxes the novel's ability to describe Betsy's lapse regarding Flora's exit. "Not knowing she was gone" (72) becomes another clause in a long scene of multisensory overload. Easily lost amid syntactic overload, this cue to innocence—a crucial tool in the narration of sexual naiveté—must be repeated as Betsy cries her ignorance out loud: " 'Bless me,' cried she, 'what is the meaning of all this?—where are our friends?' " (72).

As Haywood's grammar of distraction becomes a grammar of distracted innocence, sentences strain under the *nots* and *little-knowns* that mark the things that escape the heroine's attention. Erminia, again, provides an example of the narrative tangles that inattention creates for focalization. After she mistakes another man for her sibling amid the "promiscuous Assembly," the hubbub continues to muddle her mind as she follows the rake home (she thinks), obfuscating her environmental surroundings to remain oblivious. (She notes neither his silence—his "no Reply" as he "conduct[s] her . . . into a Hackney Coach"—nor the change of identity and destination.)[76] With the heroine coming out of a space known for sexual bacchanal, Haywood cannot simply say, "She got into the coach. Upon arrival. . . ." Instead we find a crystallized form of *Betsy Thoughtless*'s distracted grammar: "*Little suspecting the Accident that had befallen her*, she *attended not* to what Orders he gave the Coachman, and, glad to find herself out of a Place which for her had so few Charms, entertain'd her suppos'd

Brother . . . 'till the Coach stop'd at the Door of a great House: *As it was not yet light*, she *distinguish'd it not* from their own, and *innocently jump'd out*, and was within the Entry before she discover'd her Mistake: . . . 'Bless me, (cry'd she) where have you brought me, Brother?' "[77] To assure the heroine is oblivious and blameless, the story must be filled with assurances regarding all the things Erminia does not see. Lapses, thus articulated, warp narration. What interests me here is how narrating moments of inattention—particularly slips of situational awareness—strains even the most well-crafted sentence, and thus the novel's ability to orchestrate plot. As if underscoring distraction's contagiousness, the scene (and its narrator) seem to catch it, spreading from the book's characters, environment, and narrator to overwhelm the reader.

The Crowded Syntax of Sexual Inattention

Works like *Betsy Thoughtless* that sustain the conceit of environmental inattention over four volumes most fully reveal the effect of lapsed focus on narrative. As distraction accumulates, claims about the "innocence" of Betsy's sexual slips must battle a hermeneutics of suspicion in the reader, demanding an increasingly compounded grammar of distraction. Roughly halfway through the novel, Betsy ends up in a situation that poses a radical challenge to her sexual innocence: she remains utterly unaware as multiple people, repeatedly, significantly, and dangerously mistake her for a whore. This chapter-long amorous mistake is composed of a cavalcade of clueless micromoments, each requiring its own description; narrating them as Betsy's distraction stretches across cognitive, interpersonal, social, and sexual domains stretches Haywood's syntax (and her narrator) to its limit. To have her heroine end the chapter in a coach with a "rak[e] of distinction" (236) near a bagnio after midnight, mistaken for a woman of pleasure, Haywood must concoct multiple consecutive slips, each ignored by Miss Thoughtless with the equanimity of the conveniently oblivious.

Joseph Urgo argues that distraction depends on "absence . . . on something *not thought about* for its existence," a signifier that "fills the gap left in consciousness when attention to something else is let go."[78] Keeping a heroine thoughtless in a novel governed by the logic of multifocal overload, however, takes not less but more narrative space. In this scene—what I call the "mistaken-for-a-prostitute" episode—Betsy ignores Trueworth's warnings about being seen in public with a "woman [of] fame" (231) and goes to a play with the well-named Miss Forward, who has (of course unbeknownst to Betsy) become a courtesan. To present the actions to follow as heedless, *Betsy Thoughtless* embellishes *The Female Spectator*'s structures of distracted innocence, beginning with the unparsed list to convey environmental overload: "[A]las! those serious considerations were but of short duration:—the brilliant audience,—the musick,—the moving scenes exhibited on the stage, and above all the gallantries [of] several gay young gentleman,

who, between the acts, presented them with fruits and sweet-meats, soon dissipated all those reflections" (236). Parallel tracks work in concert: dashed clauses foreshadow foreshortened awareness; the catalog of stimuli overwhelms faculties of sight, sound, and taste. Both accumulate, syntactically modeling the flood of qualia that crowds out other thoughts.

Yet additional narrative alibis must adjoin a decision to accompany two men back to Miss Forward's apartment, packing the story with negations. Amid the "extremely lively" banter of this suspect group, situational awareness falters once more: "[S]he *forgot all* the cautions given to her by Mr. Trueworth—*considered not* that she was in the company of two strange gentlemen, and of a woman whose character was suspected; *nor, though she had a watch by her side, regarded not* how the hours passed on, till she heard the nightly monitor of time, cry, 'Past twelve o'clock'" (238; emphasis added). This index of things not thought about alerts us to Miss Thoughtless's perspectival failures, as well as her narrow range of perception within—and spotty coverage of—the narrative. As moments of inattention multiply (Betsy slips five times in a paragraph, and three times in a single sentence), the language of negative attention needed to mark what goes *un*noticed tangles the narration of plot. The result: a set of syntactic "nots" (e.g., the double negative "nor . . . regarded not") that tax proper grammar and style. Through overabundant cognitive mimesis, the novel provides a pretext for recurrent not noticing, reproducing the multisensory whirl that eclipses things that seem impossible to forget: Miss Forward's unreliability, the dangers of her rakish company, and the hour.

This style reemerges when the heroine finds herself once again in the hands of a libertine. Her shock is narrated according to precedent:

> On stepping into the coach, Miss Betsy directed the man where to drive; but the gentleman, *unheard by her*, ordered him to go to the bagnio in Orange-street.—They were no sooner seated, and the windows drawn up, to keep out the cold, than Miss Betsy was *alarmed* with a treatment, which her *want of consideration* made her *little expect*. . . . —she struggled,—she repelled with all her might, the insolent pressures of his lips and hands.— . . . "Oh God!" cried she, "What's here?—Where am I?—What will become of me?" (239–40; my emphasis)

This is Haywood's quintessential grammar of distraction on display: the crowd of dashes, the prototypical hedging, the (hackneyed, but necessary) cry of innocence. Her coup de grâce, a set of rhetorical questions, announces unexpectedness itself. This allows the heroine to articulate her own innocence, easing the burden of the narrator, in this case, producing the rare but compelling rake repentant who doubles as deus ex machina rescuer. Alert to the gendered signals embedded in the culture of virtue, his misreading of Miss Thoughtless's innocence compromises his own version of sexual "vigilance." He will pay a whore but not rape a virgin.

The "inadvertency" that leads to sexual danger in Haywood—here, the slips that lead Betsy from theater to hackney coach—at first seems miles apart from the faux pas Kent Puckett describes in *Bad Form*, embodied in the social sin of "eating one's peas with a knife." Yet they share a narrative dimension. Puckett suggests that the "social slip" not only "upsets the order of the drawing room but also threatens as it secures the very coherence of the novel form: the possibility of narration's fall into the fraught social world it narrates both threatens to undo a distinction between diegetic and extradiegetic narrative levels."[79] This, he argues, allows a formal connection to develop "spontaneously between narration and character," in which "characters can seem for a moment to identify with narration" or vice versa.[80] If the fictional mistake calls attention to slippage between a character's viewpoint and omniscient narration, lapses in situational awareness place even more pressure on narration and the vexed relationship with the world of which it speaks. Narrating distraction not only heightens the "possibility of narration's fall" but risks collapsing the distinction between omniscient and fallible perspectives entirely.

Haywood's characters, like most who commit faux pas, must remain oblivious. Traditionally, the narrator steps in for a corrective. Yet certain kinds of social lapses are particularly hard to narrate, especially ones where a character's slips of situational awareness are derived from things seen, heard, and attended to but distorted by an inaccurate—here, naive—cognitive framework. While this aspect of attention often falters due to an overabundance of variables, the cognitive faculty that helps us "form a coherent mental picture . . . in directing further perception and anticipating future events"[81] can also go awry because of "overreliance on a poor, incorrect, or inappropriate mental model." Individuals, according to this model from Jones and Endsley, lapse because they "ignor[e] . . . information inconsistent" with their schema and prioritize stimuli ineffectively.[82] Helpfully, Betsy states her cognitive bias explicitly: "Innocence in any one, but an idiot, might be secure in any place" (225).

Particular problems arise for narration when the novel needs Betsy to miss something subtly erotic in her social environment: a sexualized gesture, a misleading omission, or a double entendre, the narrator noting them as Betsy's naiveté rewrites them. Here, innocence and distraction work together recursively to make moments of artless interpretation possible. The heroine's easily disrupted reflections and springlike vitality of mind, the ultimate source of her innocent refrain, craft an anti-bildungsroman; experience that might yield savvy instead rebounds or slips by her. Resistant to repetition-based learning, her habitual inattention yields a mental blindness that leaves her unable to draw on cultural norms, reflect on her own behavior, use socially defined events to intersect others' mental states, or recognize how her words and actions will be interpreted. As layers of unknowing accumulate, sentences describing the unknown

and unseen not only seem to "jostle together and coexist," to borrow a phrase from Deleuze and Guattari, but overspill; unattended ideas go underground.[83]

The need to omit rather than describe this subtler kind of not knowing derives from a long-standing problem in the novel: readers have difficulty remembering that characters are oblivious to information an omniscient narrator has shared with the audience; we conflate the diegetic and extradiegetic levels of narrative and assume the characters too are (at least partially) aware. If explaining a joke risks ruining the punch line, calling our attention to moments of sexual inattention threaten to tip the eponymous heroine's thoughtlessness toward implied knowledge, suggesting that Betsy is in fact aware of what she is doing.[84] Rather than adding clausal excess, in such moments the narrative goes strangely quiet. The normally world-wise narrator takes on Betsy's innocence. Take, for instance, these suspicious moments (when she finds Miss Forward with an odd bunch before the play, when they end up seated in the pit like prostitutes, or when her escort closes her window in a brothel-bound coach):

> [S]he enter[ed] the lodgings of Miss Forward [to find her with] some company, which she herself thought, by their behavior, to be not of the best sort, *happening to be just come before her*, and departed not till it was time to go to the play. (235; my emphasis)

> [T]he house being very full, and the fellow, who had been sent to keep places for them, *going somewhat too late*, they were *obliged* to *content themselves* with sitting in the third row. (236; my emphasis)

> On stepping into the coach . . . the gentleman, unheard by her, ordered him to go to the bagnio in Orange-street.—They were no sooner seated, and the windows *drawn up, to keep out the cold*, than Miss Betsy was alarmed with a treatment, which her want of consideration made her little expect. (239; my emphasis)

The excuse about a belated messenger is a lie; the gentleman has other reasons to shade the windows; men are with Miss Forward because she's a whore. Yet these moments must appear without traditional hedging, described through the perspectival lens of innocence. With the narrator deprived of the normal techniques of inattention (which would drive already crowded scenes to incoherence), the burden of awareness shifts to the reader.

"Might as Well Be Passed Over as Read": Indulging the Diverted Reader

Crowding a grammar of distraction into a single chapter, much less a single scene or sentence, produces a narrative that imitates Betsy's crowded mind; to navigate the unapprehended—the "forgot all," "considered not," "unheard by her," "little expect[ed]," and "little guessed"—we begin to mirror her lapses. The disappearance of the narrator's interjected "nots," "little notice," and dashes for

scenes of sexual inattention, in fact, dramatizes the fragility of narrative inattention; once noticed by the reader, distraction itself risks reaching its vanishing point. So, too, vanish parts of the story line, leaving readers with a partial awareness of the fictional world.

Chatting with a rake in the theater, Betsy reveals the larger lapse of attention that undergirds the scene—and the novel—and the interpretive lacunae that place cognitive pressure on the reader. Having missed a sexual innuendo about letting her beauty "shine in the front," center stage (*actress* being an eighteenth-century euphemism for *prostitute*), her reply underscores her lack of awareness: " 'Pish,' replied she, 'I went to see the play, *not to be seen*' " (237; my emphasis). Betsy's most egregious, and narratively productive, slips involve an inability to recognize other characters' awareness of one another, her place as an object of attention, and the fact of social attention in general. She is blind, so to speak, to what George Butte calls "deep intersubjectivity": "the web of partially interpenetrating consciousnesses that exists wherever perceiving subjects, that is, human beings, collect. . . . [T]he process begins when a self perceives the gestures, either of body or word, of another consciousness. . . . [U]pon revealing a consciousness of the other's response, [one] perceives yet another gesture responding to its response, so that out of this conversation of symbolic behaviors emerges a web woven from elements of mutually exchanged consciousnesses."[85] To be mistaken for a prostitute requires an error spiral in which the heroine repeatedly mistakes the meaning of sexually loaded events, misses the web of prostitution-oriented exchanges around them, and misreads male misreadings of her misreadings and thus their presumption of her availability as a prostitute. (The gallantries are no gallantries; the invitation to "sup in a tavern" is indeed a "liberty"; her friend is a whore [236].) As with the slips that precede the "little expect[ed] . . . alarm" in the hackney coach show, the heroine's most dangerous (and narratively difficult) lapses are derived from an obliviousness to what Lisa Zunshine calls "levels of intentionality": the "I know that you know that I know" that underlies basic social exchange.[86] This problem of situational unconsciousness involves microlapses of awareness that, for fear of stylistic contagion, the omniscient narrator must often leave implicit, imposing the burden of interpretation (and the construction of full situational awareness) to the reader.

Mutually misunderstood exchanges where references to fisco-sexual availability (e.g., the offer of a two-man escort, tacitly loaded references to Betsy's "patch" [237] and her potential on stage, and a rake's unwillingness to let a woman leave without him) fly over the heroine's head. Irony becomes embedded within already embedded scenes of mutual mind reading:

> "You will give us leave then," cried one of the gentlemen, "to guard you safe home, ladies?" "That I think, my dear," said Miss Forward to Miss Betsy, "may be

> granted, for the sake of being protected from the insults of those, who may know less how to behave towards our sex." (236)
>
> "How killingly handsome you are," said he, taking her by both hands, and looking full in her face, "What a pity it is you did not shine in the front tonight? By my soul you would have out-dazzled all the titled prudes about you." . . . "Not to be seen!" cried he, "why then . . . does the jessamine, and the blooming violet play wanton in your hair?—Why is the patch with so much art placed on the corner of this ruby lip . . . but to attract [the attention], and allure us poor, admiring men, into a pleasing ruin?" (237)
>
> [After midnight, Betsy] desired Miss Forward to send somebody for a chair.—"A chair, madam," cried that gentleman who . . . had been the most particular in his addresses to her, "you cannot sure imagine we should suffer you to go home alone?" (238)

By omitting reference to these missed cues and leaving them for the reader (the tone behind "ladies" and "madam," the implications of the rake's references to Betsy's attire, or the motives behind Miss Forward's interest in supper and ride), the novel supports Betsy's obliviousness to the mistaken identity revealed in the coach: his offer of "six guineas per week" (239) for convenient sex. As lapses of intersubjectivity snowball, their complexity moves beyond the narrator's ability to sustain the double conceit (and double bind) of distracted innocence, leaving readers to intuit her ignorance. "At some point," Zunshine notes, "the agglomeration of multiply embedded minds proves too much of a cognitive load," arguing that "when cultural representations push our mind-reading adaptations to what feels like their limits . . . multiple mind-embedment [induces a] momentary cognitive vertigo."[87] Intersubjectivity becomes the engine of the ultimate cognitive slip, a collapse that integrates distracted character, implied reader, and the sentence of narration.

Moments of lapsed awareness—intersections of inattentive character, limited omniscience, and overtaxed reader—provide a useful framework for rethinking the relationship between focalization, narration, and reading. Traditionally, discussions of point of view borrow the language of sight, described as the position from which something is seen or viewed. Theories of focalization continue to rely on the metaphor of vantage point; we end up describing literary perspective in terms of range or scope: a *heterodiegetic* narrator sees things from a "bird's-eye view";[88] the *homodiegetic* sees things "through the character's eyes."[89] As *Betsy Thoughtless* reminds us, however, an absentminded heroine can see literal events around her but remain ignorant of their significance; the point is not what falls within the range of sight, but *how* a character attends to his or her environment. The heroine's perspective is unreliable, not because of what she does not see, but

because of what she does not notice. Focalization, to put it another way, is an issue of literary attention. Looking at how novels develop point of view through attention opens discussions of focalization to perspectival descriptors that exceed the narrow and the broad, the seen or the unseen. An attention-based model of focalization can include characteristics beyond the field of vision—selective bias, multifocal capacity, sensory fluidity, and the periodicity of interruption—allowing focalization theory to integrate techniques for managing situational awareness at the level of character, narrator, and reader.

As Stewart reminds us, unlike the Almighty—for whom the "multiplicity of . . . operations neither distracts his attention, nor exhausts his power . . . nor reduce[s] him to the necessity of economizing"[90]—readers are subject to human limitations: we cannot manage an infinite surplus. The strategies *Betsy Thoughtless* develops to deal with these limitations exemplify an innovation that grew out of the intersection of omniscient narration and unreliable focalization in the eighteenth-century novel: the development of techniques to compensate for the inattention that accumulates around distracted characters. To fill the gaps and assist readers whose focus is likely overwhelmed (or simply intermittent), Haywood produces extraobservant characters—semiomniscient figures, or "cognizers"—that focalize previous scenes of distraction, paying attention to things Betsy misses and the third-person narrator is forced to ignore.[91] Lady Trusty, for instance, steps in after the Oxford scene to focus on Betsy's lapses, to reinforce her innocence, and to forecast the danger of a narrator grown tired of deus ex machina rescues: "I . . . hope you have so well reflected on the danger you were in, and the consequences that attended it . . . as to be ever since more circumspect and careful with what company you trust yourself. I . . . beg you to keep always in your mind, that what has been, may some time or other be again, and that repeated inadvertencies may make heaven weary of continuing its protection" (206). A letter from Betsy's brother, Francis, appears to recast the heroine's meeting of Trueworth—a man who she only vaguely "recollect[s]" amid the crowd—and draw attention to the hero as a potentially "excellent husband" (93, 90). Though her first reading of the epistle occurs "in the midst of the hurry of dressing" (90), a later perusal resparks the heroine's interest: "though she remembered not the name; she very well now remembered there was one that seemed both times to regard her with glances . . . but not seeing him afterwards, nor hearing any mention made of him, at least that she took notice of, the imagination went out of her head" (93). The hero himself becomes an important semiomniscient figure, compensating for her novel-long aphasia regarding others' awareness. After he discovers Betsy's friend is trading sex for money, he begs the heroine not to be seen with her in public. His insight, "I beseech you, do not think of going to the play with a woman of her class:—do not expose yourself in a place where so many eyes will be upon you" (234), marks

him as a novelistic figure of attention to the web of sexual behavior, mutually exchanged awareness, and responsive gesture that the heroine misses.

In a moment the reader may (or may not) remember, Betsy ends the chapter before the mistaken-for-a-prostitute scene with an insult that foreshadows Trueworth's forthcoming role: "when I want a spy to inspect, or a governor to direct my actions," she retorts, "the choice, perhaps, may fall on you" (234). The novel revisits the theater scene a few chapters later, and narrates it again from his more attentive point of view. An extradiegetic supplement to narrative omniscience, Trueworth follows Miss Thoughtless to the theater in disguise, complete with black periwig and cloak, and watches her from above. His position in the scene—"placed in a part of the middle gallery" with "the full command [of] half the boxes"—reflects his intermediate role between character and narrator: to "step outside" and comment on elements that slip by the heroine: "Having scrutinously examined all within the reach of his view, he . . . saw Miss Forward earnest in discourse with a gentleman that sat behind her, and Miss Betsy receiving fruit from another . . .—he saw the nods,—the winks,—and the grimaces, which several in the pit made to each other, when looking towards these two ladies" (245). Trueworth, granted limited omniscience, becomes a narrative tool to draw our attention to the scene's social dynamics, ones the narrator cannot describe without risking the heroine's innocence and obliviousness. Not only does everyone think she is a prostitute, she has no idea that people—or the narrator—are paying attention to her.[92]

Yet Trueworth cannot supplement awareness after every distracted slip without doubling the length of an already multivolume work. In embodying social attention, the hero becomes a figure for the overloaded reader. Even his awareness is partial: he too mistakes Betsy for a whore. In a novel saturated with "[a]dventures thick sown, and amorous intrigues," constructing a complete view of narrative events inherently generates cognitive gaps.[93] Indeed, *Betsy Thoughtless* contains "so many near rapes," Helen Thompson notes, "that the reader loses track of them."[94] Rather than expecting her audience to keep track of the novel's seducers, Haywood tolerates—even indulges—slips. She expects readers to miss things: from innuendos to attempted sexual assaults.

According to Haywood's *The Female Spectator*, "the Reader" can only be trusted to "[cast] his Eye over the four or five first Pages" of an essay before he or she "either accept[s], or throw[s] it aside."[95] There is little reason to think she suddenly switched to presuming absorbed readers when it came to long works of fiction. Embedded scenes of reading in the novel reflect its author's cynicism about audiences' concentration on her four-volume novel. Receiving a bundle of letters, for instance, Betsy "only looked it carelessly over" (90); the heroine often reads while preoccupied, and she rarely gives "all the attention which the writers of them, doubtless, desired she should do" (208). To acknowledge the distracted

reader without attempting a Johnsonian fix marks a liberating moment in the development of the eighteenth-century novel, unleashing a set of strategies that themselves articulated philosophical possibilities—including taking advantage of readers' partial or intermittent awareness of fictional context. Expecting flighty attention to be a reader's natural state, with close attention the exception, the basal unit of this attention structure is the chapter, a bite-sized chunk of narrative paged through in fifteen or twenty minutes.

Here we find a taxonomy of attention in which gradations of focus (including distraction) define readerly engagement. Inserting comic chapter titles—à la Cervantes and Fielding—Haywood applies these paratextual cues to joke repeatedly about—indeed, invite—audiences' intermittent attention. Chapter 4 of volume 3 announces its potential to be skimmed: "*If it were not for some few particulars, might as well be passed over as read*" (349). Such sardonic cues to pass over a section, or adjust the pace and intensity of focus, appear throughout the novel; Haywood calls attention to chapters of less importance, marking those that merely continue a narrative thread and advertising cliff-hangers:

> Chapter XII, *Is little more than a continuance of the former.* (93)
> Chapter III, *Will not let the reader fall asleep.* (487)
> Chapter XX, *More of the same.* (597)

Even chapters that seem to cue focus such as "*Seems to demand, for more reasons than one, a greater share of attention than ordinary, in the perusal of it*" (497) presume a previously lax readerly attention. In this apportionment of focus, the audience can pay less attention in "ordinary" flow of reading. Distraction, and skimming, become intrinsic to attention in this narrative structure, part of a natural bending and unbending of the mind that must cyclically reappear for concentration to continue at all.

In the policing of vigilance, the schoolroom was the site of disciplinary structures Haywood's novels undercut and rewrite. The first target was the reform of hasty reading, or what Emma Clery calls "skimming and dipping";[96] speed and lightness mark a pacing prone to slips, gaps for intellectual error so wide, supposedly, they could not stand uncorrected. Haywood is perhaps closest to Montaigne, who refuses a "sergeant-major to marshall [his] arguments" in writing or reading: "I pile them up; sometimes they all come crowding together. . . . Anyway the matters traced here are not such that ignorance of them cannot be permitted. . . . I am not prepared to bash my brains for anything, not even for learning's sake however precious it may be. . . . If I come across difficult passages in my reading I never bite my nails over them; after making a charge or two I let them be."[97] John Clarke, master of a grammar school, crystallizes the opposing logic. According to his *Essay Upon Study* (1731), swift, inattentive perusal is an intellectual infraction: "[A] Piece of Misconduct in Study, is *Reading without*

Thinking, that is, without due *Attention* to what we read, or proper *Recollection* of what we have read. Many Students are apt to run over Things . . . slightly, or superficially, without staying to understand an Author. . . . [T]he running impatiently and headlong forward through [a book] is loosing all the Advantage to be reaped from them; and doing nothing."[98] If, for Clarke, distracted reading threatens the progressive logic of the Enlightenment, the equivalent of running in place, Haywood embraces the possibility of readerly distraction as a positive force. *Betsy Thoughtless* embeds moments for distracted reading within the novel's structure, believing the power of cognitive overload could be productive if harnessed.

Though consequences range from faux pas to sexual assault, moments of carefully indulged distraction in Haywood remain far from the Romantic vision of cognitive vacancy Alan Richardson finds in Keats and Shelley: the "neural sublime . . . of an overtaxed brain."[99] Yet even as it puts the heroine at risk, habitual distraction is also represented as essential to her quick wit, happy temper, and sprightliness of mind: "She was, indeed, of a humor the most perfectly happy for herself that could be;—chearful,—gay,—not apt to create imaginary ills, as too many do. . . . —On any real cause, either for grief or anger, that happened to her, no body, it is certain, felt them with a more poignant sensibility;—but then she was affected with them but a short time.—The turbulent passions could obtain no residence in her mind, and on the first approaches of their opposite emotions entirely vanished, as if they had never been" (455). The inattention that causes Miss Betsy to miss sexual advances becomes a cognitive tool for sustaining joy amid emotional distress. Once romantic attention is tethered to a single romantic object—the hero—the dangers of a multifocal mind can move to the background, drawing her intellectual style and charismatic *gaité du coeur* into focus.

While their inattentive habits were still punished, the coquettes of eighteenth-century fiction were stigmatized less and less frequently for moments of distraction. Haywood's *Female Spectator* reversed attacks on distracted women by claiming distraction—and the soft female brain—as a mark of cognitive superiority:

> If, by the Texture of the Brain, as some pretend to alledge, we are less capable of deep Meditations, and have a Multiplicity of volatile Ideas, which, continually wandering, naturally prevent our fixing on any one Thing; . . . [this tendency is also a catalyst]. The Vivacity of our Ideas,—the Quickness of our Apprehensions, and those ready Turns which most Women, much more than Men, have on any sudden Exigence, seem to me to proceed from a greater Redundance of the animal Spirits; and if they sometimes appear too confus'd and huddled, as it were, together, it is but like a Crowd or Mob round the Stage of a Mountebank, where all endeavouring to be foremost, obstruct the Passage of each other.[100]

Even as it risks a bottleneck, the crowding of thought prompts quick insights; drawing on the staccato of volatile ideas, distraction's multiplicity becomes a source of vibrancy, a formal precursor to the concept of creative dissonance in Sterne.

With this, we can return to Pope's original slight on the female brain: the "Matter too soft a lasting mark to bear" and its corollary about lack of focal imprint, "Most Women have no Characters at all." Capitalizing on misogyny, Haywood uses the receptivity and imperviousness of the female brain to articulate a flexible relationship between character and environment as well as a dynamic model of situational awareness able to accommodate multiplicity. Margolin argues that "[t]he fictional presentation of cognitive mechanisms in action, especially of their breakdown or failure, is itself a powerful cognitive tool which may make us aware of actual cognitive mechanisms, and, more specifically, of our own mental functioning."[101]

Yet the argument for attention as parallel processing in *Betsy Thoughtless* emerges not simply from the presentation of a distracted character's mind but from the narrative techniques that extend those distracted lapses to narrator and reader. While, in philosophy, one might talk about the "infinity" of stimuli pressing on the mind or the challenges of parsing multiplicity, in fiction it becomes possible to represent situational awareness in minute detail. As the heroine slips, Haywood can represent situational attention as a multifocal cognitive process that can break down under multiplicity. Portrayals of lapsed vigilance crystallize eighteenth-century arguments between those who believed that the attentional spotlight was narrow, and thus restricted informational processing a *priori*, and those who believed this narrowing occurred a posteriori, allowing the field of situational and environmental awareness to remain broad. Balancing concepts more integral to early-selection theory with those that would become central in late-selection theory, *Betsy Thoughtless* intervenes in attention studies, pointing to the lasting impact of eighteenth-century frameworks for discussing serial and synchronous processing on situational awareness.

The leap across centuries is worth a pause. Foucault is right to question the truth claims and categories of modern science. Eighteenth-century writers did not conduct double-blind studies of dichotic listening—far from it. Yet if it is questionable to accept scientific truth claims based on a well-historicized system of empiricism, objectivity, logical positivism, it is equally silly to suggest that the intellectual excavation of historical concepts of mind must, by nature, find—and find only—conceptual formations radically different from our own. To uncover the epistemes and discourses governing conceptual possibility in a given historical moment (say, between 1660 and 1830) need not presume, ad hoc, their incommensurability with the contemporary; indeed, one of this book's main arguments is that the categories we now use to conceptualize attention are

historically derived and inflected. To put it more frankly, to presume the irreconcilability of historical theories of mind and modern cognitive science is to forget the history of the latter. To claim the irrelevance of eighteenth-century thought to contemporary neuroscience is as blind, I would argue, as assuming that neuroscientific facts are merely "discovered," springing into being as if from the mind of Jove unshaped by experimental protocols and models that have a history.

Eighteenth-century theories of vigilance, with their militaristic idioms, inflect both the language used to describe situational awareness as a cognitive process and the studies conducted to test it. Much research on lapses of situational awareness focuses on dangerous, or high-impact, slips that involve the integration of complex information flows where breakdowns in multifocal coordination threaten an individual or group. Such studies can range from the banal (as when we lose the thread of conversation or miss a turn on the road), to the highly specialized (lapses in dynamic processing by an airline pilot, a military commander, or a neurosurgeon).[102] Yet the field of situational awareness tends to target the military-industrial complex, investigating attention's role in military command and control, aviation and air-traffic control, nuclear power plant operations, and high-pressure medical operations—from first-response emergency medical services to surgeries with high morbidity rates.

As cognitive scientists Smith and Hancock put it, sustaining the "adaptive, externally directed consciousness [in] a dynamic task environment" appropriate for high-pressure situations becomes difficult in cases with an increased need for multifocal coordination.[103] The goal of these experiments, like the eighteenth-century codification of *Rules and Regulations for Formations*, is to train attention (i.e., allow for the automaticity and ease of the specialist) to avoid error. The Enlightenment goal behind the discipline of the soldier, with "motions . . . taught and practiced . . . until each recruit is perfect in them" still undergirds these studies. This is far from purely abstract. Neuroscientific and behavioral experiments on situational awareness have shaped training paradigms in a range of professions. In 2010, for example, Endsley's situational awareness studies were translated into a situational training model for fighter pilots in the Spanish air force.[104]

Yet, in our conceptual narrowing from the eighteenth-century's environment-oriented attention and distraction to the task-based entelechial juggernaut of the modern brain, we obscure an aspect of situational awareness that is, in fact, crucial to our everyday experience: the ongoing impact of environment on cognition. At the neurological level, our distractions, our slips, our cognitive habits are inscribed, producing patterns that influence future action. As Endsley reminds us, situational awareness (and its lapses) shape our perception of environmental surroundings and "provides the primary basis for subsequent decision making and performance in the operation of complex, dynamic systems."[105] The same,

one must say, holds for our lapses of awareness amid environmental overload. Imagined as a figure for—and the characteristic product of—her urban environment, the coquette's attraction to multiple suitors derived from her exposure to the diversions and "luxury goods flooding domestic marketplaces" in London.[106] A stock character type, she nonetheless emblematizes the ability of one's surroundings ("—the brilliant audience,—the musick,—the moving scenes," the "fruits and sweet-meats," and the "gallantries [of] several gay young gentleman") to shape the mind and its awareness. If so, we can see the eighteenth century beginning to theorize neural plasticity not through scientific empiricism but through its literature. The figure of the inattentive heroine becomes the fulcrum for a set of narrative experiments that grapple with the cognitive-narrative complexity of distraction, and the partial awareness not only of the reader of books but of any individual seeking to "read," with total clarity, an inherently dynamic situation and world.

Scattered Attention

Distraction and the Rhythm of Cognitive Overload

The word *scatterbrained* first appeared midcentury in the anonymously authored *Memoirs of the Nutrebian Court* (1747) in the phrase a "scatter-brained madman."[1] Johnson's definition of *shatterbrained* from 1755 followed suit in tying distraction to madness; his *Dictionary* links scattered attention with a broken head:

> SHATTERBRAINED. SHATTERPATED. *adj.* [from *shatter brain* and *pate.*] Inattentive; not consistent.
>
> To SHATTER. *v.a.* [*schetteren*, Dutch.] To break at once into many pieces; to break so as to scatter the parts. . . . To dissipate; to make incapable of close and continued attention.
>
> DISTRACTION. *n.s.* [*distractio*, Latin.] Tendency to different parts; separation. . . . Confusion; state in which the attention is called different ways. . . . Madness.[2]

To be scatterbrained, quite literally, was to have a shattered pate. Distraction's energy made it a lively mode of mind, with power enough to pull the mind apart; Johnson's definition of *distraction* draws on this energy to evoke a violent cognitive sundering. According to this theory, pulling the attention in multiple directions breaks the mind, producing an inconsistent, interrupted mode of thought.[3]

Thirty years later, William Cowper provided a surprisingly lighthearted vision of the scatterbrain. In a letter to his nephew in 1790, Cowper uses the term to remind the absentminded young man to answer a letter from his aunt: "You have by this time, I presume, answered Lady Hesketh's letter. If not, answer it without delay; and this injunction I give you, judging that it may not be entirely unnecessary; for . . . I have found out that you are a *scatter-brain*. . . . [I]n this you very much resemble myself, who in the course of my life have, through mere carelessness and inattention, lost many [things]."[4] Here, the scatterbrain is far from broken-minded or mad. The nephew is merely heedless, a type whose brain scatters ideas instead of organizing (or remembering) them—someone much like the poet himself. By century's end, the scattered brain has become an idiosyncrasy, a quirk with light connotations of the creative.[5]

Laurence Sterne's *Tristram Shandy* (1759–67), whose scattered narrator is the century's "hare-brain'd" hero par excellence, provides a striking example of the period's fascination with overload, cognitive breaks, and irregular rhythms of attention. *Scattered* is the word that best describes Tristram's eccentric brain and prose; numerous fictional events conspire to leave Sterne's protagonist with a uniquely scattered—even shattered—brain. His mother's famous midcoitus distraction (a question about clock winding) disrupts Walter Shandy's sexual rhythm: "——Good G—! cried my father, making an exclamation, . . . it was a very unseasonable question at least,—because it scattered and dispersed the animal spirits, whose business it was to have escorted and gone hand-in-hand with the HOMUNCULUS, and conducted him safe to the place destined for his reception."[6] This interruption is later described by Tristram as the "melancholy" event "——when the few animal spirits I was worth in the world . . . were all dispersed, confused, confounded, scattered, and sent to the devil" (215).[7] It not only "scatter[s] . . . the animal spirits" meant to escort his "Homunculus" (itself "endowed with the same loco-motive powers," "facilities," "nerves," and "brains" as a full-grown human) but also is claimed to shape both the hero's personality and his novel's style (2). Dr. Slop's use of forceps midlabor breaks Tristram's nose, suggesting this shaping is literal; the tool also compresses (and implicitly distorts) his infant brain, leaving him intellectually prone to diversion. In a final turn, Tristram claims his proclivity toward digression and multitasking comes from his father's own distracted tendencies, himself prone to having "a hundred-and-fifty odd projects [take] possession of his brain by turns." The ultimate result, Tristram claims, is a "large uneven thread" running through his cerebrum, an inheritance that will only be fully visible—"without spectacles"—in a postmortem dissection of his brain (325).

Fictional minds in Sterne's novel frequently become distracted and scatter into dashes when a character tries to attend to multiple things at once. The history of distraction I am interested in here, then, is not a wandering off topic

(Johnson), nor a lapse in which one misses essential information (Haywood), but the fragmented rhythms of scattered attention. Indeed, as I will argue, Sterne portrays *Tristram Shandy*'s unusual narrative tempo as the product of the hero's multifocal mind—one that moves, not in single lines of attention, but in many simultaneously. The alleged autobiography of a distracted narrator, the novel is constantly derailed by digressions and dashes. An authorial preface appears in the middle of the third volume; and though the tale begins with the hero's conception, our protagonist remains unborn until the same, unnamed and unchristened until volume 4.

The scene of distraction that gives the hero his name is a case in point. The boy is named Tristram only because Susannah, the Shandys' maid, is unable to remember the child's intended name (Trismegistus) the "length of the gallery without scattering" (208). "'Tis *Tris*——something" is all she can stammer to the waiting curate. Her forgetfulness exemplifies what psychologists now call a slip of working memory, a breakdown in the cognitive faculty that allows "several pieces of information to be held in mind at the same time and interrelated."[8] Allowing us to manage multiple items simultaneously, working memory is essential to multitasking: what allows us to carry the two in mental calculation or remember everything we need at the grocery store without a list. Yet working memory capacity is limited to only a few items—for most people, no more than seven, or as psychologist George Miller would put it, "the magical number seven, plus or minus two."[9] Often, we manage surplus by "chunking," or bundling similar items into more manageable units, but our minds slip more frequently if we try to handle more than four chunks. This phenomenon of clustering data, aided by regular patterns or rhythms, is also easily disrupted by irregularity. Working memory overload produces a specific kind of cognitive lapse: a break, or scattering, of focus. Frequently manifested in momentary forgetfulness, we experience this cognitive breakdown as jumbled or fragmented thought—the classic tip-of-my-tongue slip of Susannah's "'Tis *Tris*——."

"Eighteenth-century fiction is so much writing about the mind," Jonathan Kramnick notes, and the novel "since its inception [took] remarkable interest in mental states."[10] With Sterne, we turn to a third form of distraction: *scattered attention*, a mode of mind that moves quickly and erratically from one topic to the next, creating disorganized rhythms of thought that often spiral out of control. Individuals who demonstrate this style of mind are prone to wide-ranging associations and patterns of disconnected thought, a difficulty excluding "distractors" that leaves them predisposed to overload and idiosyncratic rhythms of attention not easily aligned with their environment. Following a working memory crash, their attention scatters into disorganized "flights of thought." This relationship between scattered attentional rhythms and cognitive overload, however, is bidirectional, a feedback loop in which each influences and helps

to produce the other. This chapter thus brings together two bodies of cognitive research that deal with how, why, and when attention scatters: the first on working memory capacity and overload, the second on how rhythms in our environment affect our ability to "chunk" information. Regular rhythms not only guide attention but help organize it into manageable units, decreasing load and increasing our capacity to handle stimuli. Irregular rhythms, by contrast, make it harder to chunk, resulting in thoughts that are harder to retain.

Sterne claims the hero's scattered brain is the source of his irregular prose as well as his recurrent overload. The novel alternates between a breakneck pace ("a good rattling gallop . . . curvetting and frisking it away, two up and two down for four volumes together" [216]), slower bits that describe events in detail ("The stranger's mule moved on at so slow a rate, that he heard every word of the dispute" [179]), and metacommentary on temporal dilation ("It is two hours, and ten minutes,——and no more,——cried my father, looking at his watch, since Dr. *Slop* and *Obadiah* arrived,——and I know not how it happens, brother *Toby*,——but to my imagination it seems almost an age" [137]). Scattered attention becomes narrative rhythm: "Once set a-going," the narrator goes "cluttering like hey-go-mad," gathering ideas at increasing velocity before the inevitable crash (1–2).

Transforming scattered attention into a narrative rhythm, *Tristram Shandy* evokes the energetic distraction of an unfocused mind. Imagining distraction as a pattern of temporal leaps rather than as a spatial digression from an ideal point of focus, *Tristram Shandy* reveals the powerful role literature played in advancing Enlightenment ideas about multifocal cognition, developing a narrative form to articulate the intersection of attention and memory, overload and rhythms of focus. Weaving the conceit of distraction into a narrative style of layered syntax, plotlines, and cognitive breaks, Sterne develops a language—indeed, a novelistic structure—to model simultaneous cognition. This prose style not only mimics the rhythms of scattered attention but seeks to invite them in readers, pushing Sterne's audience to test and exceed working memory capacity. Rather than casting their inevitable cascade of memory slips as a loss, his novel envisions distraction as able to rekindle thought in a burst of spontaneous productivity.

Rhythms of Narrative, Rhythms of Mind

My use of the term *rhythm* follows an eighteenth-century precedent of thinking about temporal patterns in the mind—and literary form—in musical terms, as well as a trend of describing the brain's response to stimuli in terms of vibrations and rhythmic oscillations.[11] The chief proponent of this latter idiom for describing the brain was David Hartley. His *Observations on Man* (1749), which Jonathan Lamb argues had a powerful influence on both of Sterne's novels, suggested that any sensory impression "sets up vibrations which are transmit-

ted to the medullary substance of the brain" and as these signals run along the solid (but porous) "capillaments of the nerves . . . are registered there as those vibrations."[12] The repetition of such vibrations, "once set a-going . . . presently make a road of it," or as we might now put it, form neural pathways. According to Richardson's gloss of Hartley's system, "these vibrations or oscillations" in the nervous system "then trigger corresponding tiny vibrations ('vibratiuncles') in the medullary substance of the brain," resulting in the creation of a cognitive trend that, reinforced, could become a personal disposition.[13]

Hume's *Treatise* imagines that the distinctive vibrations of thoughts and passions could create dissonant rhythms in the brain; emotions move at different paces and resonate, allowing overlap:

> [The human mind] resembles a string-instrument, where after each stroke the vibrations still retain some sound, which gradually and insensibly decays. The imagination is extreme quick and agile; but the passions are slow and restive: For which reason, when any object is presented, that affords a variety of views to the one, and emotions to the other; tho' the fancy may change its views with great celerity; each stroke will not produce a clear and distinct note of passion, but the one passion will always be mixt and confounded with the other.[14]

Imagination's staccato strikes against the slower fermatas of the passions; as each idea and feeling accumulates, the mind forms polyphonic melodies and rhythms. Rather than chords that fall on regular beats according to a strict time signature, the result is a mixture of "confounded" syncopations that compose the everyday pandemonium of cognition.

This marks a departure, not only from associationism, but also from traditional theories of prose rhythm. According to Cicero, good prose rhythms were geometric, modeling the continuity and symmetry of a circle. Claiming that the ear "expects the words to bind sentences together" into a smooth, continuous line of sound, he declared all else (i.e., any rhythmic irregularity) harsh, even aesthetically mutilated.[15] Though Enlightenment writers praised Cicero's theories, baroque and classical composers had begun experimenting with irregular rhythms, including "syncopation, shorter notes at stressed parts of the bar, phrases that avoid regular four-bar or eight-bar patterns, and short-term displacement of accent, or hemiola."[16]

To describe these patterns, theorists moved away from Cicero's geometric model toward a more abstract conception of rhythm. Jean-Jacques Rousseau, in 1765, defines rhythm as a changing proportion between two pulse-sequences in time:

> RHYTHM . . . the proportion that the parts of a measure, parts of a movement, or even parts of a whole have with each other: in music it is the difference in movement which results from speed or slowness, from respective length or brevity of the notes.

> [RYTHME . . . la proportion que les parties d'un tems, d'un mouvement, & même d'un tout ont les unes avec les autres: c'est, en musique, la différence du mouvement qui résulte de la vîtesse ou de la lenteur, de la longueur ou de la briéveté respective des notes.][17]

This emphasis on the dynamic relationship between part and whole—speed and slowness, length and brevity—brought attention to rhythmic irregularity and patterns of syncopation over time. Rousseau proposes such rhythms could be musically generative, producing an almost infinite variety of beats:

> Out of mixing two or several equal or unequal rhythms, where two equal or unequal beats were at work arbitrarily could be born a host of possible modifications to the tempo of a rhythm, which have no limits other than those proportions . . . the ear is not capable of perceiving.
>
> [Ainsi, de ces deux moyens combinés naissoit une foule de modifications possibles dans le mouvement d'un même *rhythme*, qui n'avoit d'autres bornes que celles au-deçà ou au-delà desquelles l'oreille n'est plus à portée d'appercevoir les proportions.][18]

Mixed rhythms created new tempos, whose modulations were bounded only by our ability to hear their complexity.

Conceiving scattered attention as tempo, albeit an irregular one, writers need no longer imagine the distracted mind as sundered by a focus pulled multiple directions in space; thought can instead move in scattered beats in time that capture a generative polyphony. Attention does not need to stand still, or be "fixed," but can follow the changing patterns, or beats, of the surrounding world. Hume and Diderot define distraction as an interruption in attention's proper temporal motion; if attention is a tempo—a dynamic cognitive process that keeps the mind in sync with the world—distraction indicates a cadence that falls out of synchrony with the present. The distracted mind's rhythms, a staccato pattern of irregular disjunctures, suggested mind and world have become disjoined. This falling out of time was what led Sterne, like Diderot, to suggest that distraction's tempo could bring unexpected ideas together into productive asynchrony; a mind off beat may risk overload, but it also allowed thoughts to strike against each other and awaken the new.

Analyzing the scattered prose rhythms *Tristram Shandy* crafts to capture creative polyphony, this chapter also offers a method for reading novels in terms of rhythms of attention, both those of characters and those of readers. Sterne models distraction by creating prose rhythms to match the complex cognitive rhythms of each character's focus. Every character is given his own eccentric tempo and pattern of attention, with a distinct relationship to clock time. Each consciousness in *Tristram Shandy* is thus doubled. As Jean-Jacques Mayoux

puts it: "Each consciousness is double; it carries the sense of one's own existence, with all its concerns butting in, and a vague, discontinuous awareness of the external world implying external time. The resulting impression is a cross product of the two systems, creating a particular tempo."[19] This patterning of distraction produces a narrative illusion that moves beyond what James Phelan calls the rhetorical phenomenon of *voice*: seeing "black marks on a white page and hear[ing] the sound of speech in our ears."[20] This is the phenomenon of *narrative rhythm*—hearing how the voices and narrative patterns in one passage relate to another over time and feeling the changing beat of an evolving tempo. To hear this rhythm requires reading the novel's chapters not just for their content but for their beats. This style of listening is something to which we are not particularly accustomed in studies of the novel. For I am not talking about the rhythm of narrative events but about the rhythm of prose itself.

Tristram's Style and the Scattered Rhythms of Cognitive Overload

> En écrivant ma pensée, elle m'échappe quelquefois; mais cela me fait souvenir de ma faiblesse, que j'oublie à toute heure.
>
> [In writing [down] my thought, it sometimes escapes me; this makes me remember my weakness that I forget all the time.]
>
> —*Blaise Pascal,* Pensées, *1660*[21]

Writing, Tristram claims, is an act prone to overload. His particularly digressive method of storytelling, however, creates an unusually large number of narrative threads to attend to and an equally large number of memory slips: "[W]hen a man is telling a story in the strange way I do mine, he is obliged continually to be going backwards and forwards to keep all tight together in the reader's fancy——. . . there is so much unfixed and equivocal matter starting up, with so many breaks and gaps . . . that the world is apt to lose its way . . . ——and now you see, I am lost myself!——" (325). The hero claims *Tristram Shandy*'s narrative eccentricities—its changing paces and irregular dashes—are the result of an innately digressive rhythm of mind. Gathering ideas at rapid-fire pace, he flies through the text "like lightning," always looking behind him for bits left out: the result is a "motion . . . most rapid——most impetuous——." Moments of working memory overload come faster and faster as the missing pieces accumulate:

> Now ride at this rate . . . ——'tis a million to one you'll do some one a mischief, if not yourself——He's flung——he's off——he's lost his seat——he's down——he'll break his neck——see!——if he has not galloped full amongst the scaffolding of the undertaking critics!——he'll knock his brains out against some of their posts——he's bounced out!——look——he's now riding like a madcap full

> tilt through a whole crowd of painters, fiddlers, poets, biographers, physicians, lawyers, logicians, players, schoolmen, churchmen, statesmen, soldiers, casuists, connoisseurs, prelates, popes, and engineers——(216)

In prose predisposed to such "madcap" rhythms, narrative time falls out of joint:

> I am this month one whole year older than I was this time twelve-month; and having got, as you perceive, almost into the middle of my fourth-volume. . . . [A]t this rate I should just live 364 times faster than I should write——It must follow, an' please your worships, that the more I write, the more I shall have to write——and consequently, the more your worships read, the more your worships will have to read. *Will this be good for your worships eyes?* (207; my emphasis)

Always racing ahead yet simultaneously behind, the story is out of phase with the time of the writer, the time of the plot, the time left for the writer to compose it, and the time of the always waiting, always overloaded reader.

In this conceit, the "hare-brained" Tristram models the narrative patterns of a mind that races from thought to thought before an inevitable cognitive crash: a working memory slip (305). Like his father, the hero's mind fragments into dashes when he tries to handle too many thoughts at once:[22]

> Could a historiographer drive on his history, as a muleteer drives on his mule,——straight forward; . . . without ever once turning his head aside either to the right hand or to the left . . . but the thing is, morally speaking, impossible: For, if he is a man of the least spirit, he will have fifty deviations from a straight line to make with this or that party as he goes along . . . he will moreover have various
> Accounts to reconcile:
> Anecdotes to pick up:
> Inscriptions to make out:
> Stories to weave in:
> Traditions to sift:
> Personages to call upon:
> Panegyricks to paste up at this door:
> Pasquinades at that:—— (26)

Tristram's writing, always with "fifty deviations from a straight line," models the difficulty of organizing information into linear narrative. Characteristically, he tries to weave, sift, reconcile, and paste up his various accounts, anecdotes, inscriptions, and personages in one burst; he wants to "tell the world" all, and all at once (102). The cognitive demands of such parallel processing repeatedly leave the hero overwhelmed. As these gymnastics accelerate, Tristram's mind inevitably reaches its limit; working memory slips.

According to Pascal, writing down our thoughts inherently leads to slips of

memory, drawing our attention to how often this happens: "I forget all the time." We see this when Tristram narrates his mother's response to his father's theory of noses. Halfway through the sentence, he breaks off because he has been trying to manage too many narrative goals. Though he starts with "but two things to observe," he ends with 1,150 of them, which would collapse any working memory (170). "My mother, you must know——" he begins, then fractures into dashes: "——but I have fifty things more necessary to let you know first,——I have a hundred difficulties which I have promised to clear up, and a thousand distresses and domestic misadventures crouding in upon me thick and three-fold, one upon the neck of another,——a cow broke in (to-morrow morning) to my uncle *Toby*'s fortifications, . . . ——*Slop* to be *crucifix'd*,——myself to be *tristram'd*, and at my very baptism made a martyr of;——" (170–71). In this moment, Sterne reflects on the strain that the act of writing—drafting while keeping track of all the things left to be done, remembering what needs to happen and when—places on attention and memory. To this challenge, Tristram adds his bias toward parallel processing, an inheritance of his mother's clock-based interruption and his father's distorted narrative—indeed, anatomical—line. While, in Haywood, each dash marked an individual piece of information that crowds the heroine's mind, in Sterne, each dash-cradled clause marks a cluster of synchronous thoughts. As Tristram tries to weave them together, his mind crashes. The cows, doctors, and tristrammings crowd "in upon [him], thick and three-fold," displacing his mother and whatever it was we needed to know about her. The sentence breaks into idiosyncratic beats, each marked with a dash.

"I have a great respect for the Shandean dash," writes Herbert Read; "it has a [critical] part in the rhythm of Sterne's periods, which would often avoid anything so abrupt as a full stop."[23] The pauses that dashes create in *Tristram Shandy* are crucial to the depiction of distraction's cognitive tempo in two distinct ways. First, dashes mark junctions between overlaid narrative threads and thoughts, building a sense of synchronous cognition. Second, they mark the interruptions, or focal rests, produced as the mind becomes overloaded, also imagined as a flash of spontaneous innovation. Punctuating Sterne's prose, dashes evoke not only the changing rhythms of thought but also unexpected connections between ideas. As interruption, as connector, as tempo marker, the dash seeks to capture distraction's creative element: the reawakening of ideas through the mind's scattered paces.

Uncle Toby's unfinished "I think" offers a classic example of how Sterne's work imagines the narrator's dash-punctuated rhythms generating novel text. When the passage begins, Tristram is relating a conversation between his Uncle Toby and his father. He gets as far as "I think, replied my uncle *Toby*" when he decides that the reader needs to "enter first a little into [Toby's] character" (45). Soon, our hero is maintaining three lines of narrative: (1) Toby's reply to

his father's question; (2) the portrayal of his uncle's character; and (3) the larger story of his birth. Holding the first idea in mind while he begins the second, Tristram is distracted by a new thought: a perfect quote on how the variable English climate produces "whimsical" personalities like Toby's. At this point, Tristram's working memory crashes. With four threads running at once, he cannot remember the writer's name. The narrative splinters into dashes:

> ——Pray what was that man's name,——for I write in such a hurry, I have no time to recollect or look for it,——who first made the observation, "That there was great inconstancy in our air and climate?" . . . "[This] furnished us with such a variety of odd and whimsical characters;"——that was not his;——it was found out by another man, at least a century and a half after him:——Then again,——that this copious store-house of original materials, is the true and natural cause that our Comedies are so much better than those of *France*, or any others that either have, or can be wrote upon the Continent; (45–46)

Tristram might not be able to remember the name, but his forgetting inspires a prolixity that overcompensates for this lost thought. His distraction prompts a surge of ideas, each marked by a dash. As he leaps haphazardly from topic to topic, the hero builds a multifocal narrative: he traces the lineage of climate theory through Dryden and Addison, waxes rhapsodic on the act of writing, and investigates the allocation of comic genius in France and England before branching into an exploration of knowledge that considers all things "physical, metaphysical, physiological, polemical, nautical, mathematical, aenigmatical, technical, biographical, romantical, chemical, and obstetrical, with fifty other branches . . . (most of 'em ending, as these do, in *ical*)" (46). Only then does he remember Toby, "whom all this while we have left knocking the ashes out of his tobacco pipe" (47).

Amid this storm of ideas, the hero's triaged breakdowns of working memory (his uncle, the dialogue, the author's name) enacts Walter's prophecy: "no one idea can enter his brain . . . but a magazine of conceptions and conclusions may be drawn forth from it" (285). His prose becomes a "copious store-house of original materials" ripe for recombination (46); this recombination, in turn, contributes more dashes and layers, and so it goes. In the case of Uncle Toby's unfinished sentence, his digression lasts over fifty pages. Despite the fracturing this creates, Sterne believes such irregular cognitive rhythms have value, capturing the generative frisson of ideas striking one against another.

Previously, in the Enlightenment, individuals whose thoughts fell eccentrically "out of time" with the world were characterized as mad; sane minds sustained a rhythm in harmony with their environment. According to eighteenth-century writer Soame Jenyns, "ideas [are to] follow each other in our minds in a regular and uniform succession, not unlike the tickings of a clock . . . and if any vary

much from that destined pace, by too rapid, or too slow a motion, they [become] totally imperceptible."[24] Many of the period's cures for madness rely on techniques to "correct" eccentric mental rhythms, bringing them back into real time by providing the mind with new motions, such as via travel. As Michel Foucault notes, "external distractions," were to return "a mind which had escaped in the vibration of its interior movement" into appropriate rhythm with the surrounding world: "The therapeutics of movement [allow] a seizure by the world of the alienated mind. It is both a 'falling in step' and a conversion, since movement prescribes its rhythm . . . a constant appeal to the mind to leave itself and return to the world."[25]

According to Diderot, however, offbeat cognitive rhythms give distraction a generative spontaneity. A mind slightly out of sync with its surroundings is also one with "une extrême facilité dans les idées de se réveiller les unes les autres" (an extreme facility in allowing the ideas to trigger, or reawaken, one another). Distraction frees the mind to move at an unconstrained pace, facilitating "application de notre esprit à un autre objet que celui dont le moment présent exigeroit que nous continuassions de nous occuper" (application of our mind to another object than the one we should be focusing on at the time).[26] Instead of wandering from idea to idea, the mind applies itself to unconventional thoughts *en groupe*, encompassing their multiplicity. This ability to step outside attention's regular cadence, Diderot thought, created useful variations in mind time, a productive syncopation to the background rhythm of the world. *Absorption*, according to Diderot, described a successive action in time—"une action générale . . . mais successive, qui en ne commençant que sur une partie du sujet, continue ensuite & s'étend sur le tout" (a general act [of mind that is also essentially] successive, which only starts on part of a subject [but] then continues & extends over all).[27] *Distraction*, in this temporal framework, marked a flickering of consciousness in time, a spontaneous, offbeat tempo that was far from continuous. Unlike the madman whose mind is unchained from the world's rhythms, "l'homme capable de distraction" harnesses its spontaneity without becoming lost:

> L'homme *distrait* les suit toutes indistinctement à mesure qu'elles se montrent. . . . [il] jette un coup-d'oeil sur les idées étrangeres à son objet, & ne s'attache qu'à celles qui lui sont propres. . . . L'homme dans la *distraction* perd de vûe tout ce qui l'environne; & quand il revient de son délire, il agit comme si rien n'avoit changé autour de lui; il cherche des objets où ils ne sont plus . . . la *distraction* est une absence . . . dont on ne connoît presque jamais exactement la durée.
>
> [The distracted man follows all ideas indiscriminately as they show themselves . . . he throws a glance at ideas that are foreign to his current object and focuses only on his own. . . . The man in a state of distraction loses sight of all that is in his environment; and when he revives from his delirium, it seems as though nothing

> has changed around him; he looks for objects that aren't there. . . . Distraction is an absence [of mind] the duration of which one can never truly know.][28]

The friction created by the unique combinations that result when one returns to the moment are essential to creative production. Diderot refrains from suggesting that it is the *mind* that recombines ideas, activating this process of generation. Distraction's productivity instead comes from the friction of ideas infrequently paired: that is, from their odd juxtaposition in time. The power of such moments thus does not lie in a natural affinity between ideas that the genius discovers; reawakening comes from their chance friction; their very *lack* of prior connection is the gestalt of new thought. In *Tristram Shandy*, Sterne imagines that these moments, when overload meets dissonant rhythms of mind, give working memory slips the power to catalyze both narrative and mind.

Susannah and the Vexed Situation of Madam Reader

> Human understanding is as much limited as human power or human strength. The memory can retain but a certain number of images.
>
> —*Lady Mary Wortley Montagu*[29]

Susannah's memory slip surrounding Tristram's name—Greek for "thrice-great Hermes"—models the state of Sterne's reader in microcosm.[30] If readers must manage Tristram's prose—half-finished sentences, interrupted dialogue, convoluted plotlines, and idiosyncratic chapter breaks—Susannah must remember just one word: *Trismegistus*. Or, more accurately, she must recall four syllables, *Tris, me, gis, tus*. Yet she, like all of us, can only handle "a certain number of images" before reaching her limit. When Susannah runs downstairs to ask Walter what to name the new baby, it is only after a dizzying round of interruptions that Mr. Shandy makes a decision; following the announcement, another round of banter fills the maid's mind before she scurries back to the curate to pronounce: "'Tis *Tris*——something."

Sterne's comedy relies on a basic fact: Somewhere between the hallway and stairs, Susannah's attention and memory slips; the name fractures into syllables, leaving her with only a "*Tris*——." (And later, the hybrid *Tristram-gistus*). According to the men of the novel, Susannah, like many female servants of eighteenth-century fiction, has a mind impervious to imprint, a stereotype the curate reinforces when he calls her a "noodle," a variation on "noddle," a vulgar colloquialism for a small head or brain (208).[31] For Walter, Susannah, much like Betsy Thoughtless, is a caricature of the soft-brained and distraction-prone. The problem of scattering *Trismegistus* lies in Susannah's gendered head, born with a mind more like a colander than a cup. Yet in *Tristram Shandy*, the envi-

ronment surrounding the maid at the moment of encoding—what figuratively *fills* the colander—is as important as the quality of her mind. Here, the maid's "'Tis *Tris*——" is a problem of cognitive overload. The baptism scene is a whirl of half-finished questions and dashes; there is always more than one matter to attend to, and none of them is *Trismegistus*. Susannah forgets because Walter won't stop distracting her; she loses focus when asked to retain too much information at once.

In this reading, Walter Shandy's scattered patterns of thought and speech, conveyed in Sterne's dash-filled prose, turn Susannah's memory into a leaky vessel. The novel's crowded syntax exaggerates the distractions surrounding the maid as they crescendo toward her memory slip:

> Then reach me my breeches off the chair, said my father to *Susannah*——There is not a moment's time to dress you, Sir, cried *Susannah*——the child is as black in the face as my——As your, what? said my father, for like all orators, he was a dear searcher into comparisons——Bless me, Sir, said *Susannah*, the child's in a fit——And where's Mr. *Yorick*——Never where he should be, said *Susannah*, but his curate's in the dressing-room, with the child upon his arm, waiting for the name—— (207–8)

> No, no,——said my father to *Susannah*, I'll get up——There is no time, cried *Susannah*, the child's as black as my shoe. *Trismegistus*, said my father——But stay——thou art a leaky vessel, *Susannah*, added my father; canst thou carry *Trismegistus* in thy head, the length of the gallery without scattering?——Can I? cried *Susannah*, shutting the door in a huff——If she can, I'll be shot, said my father, bouncing out of bed in the dark, and groping for his breeches. (208)

Never answering her directly, Walter floods Susannah's mind with off-topic concerns: hand him his breeches, finish her sentence, explain her simile, locate Parson Yorick. Each dash adds a new object, giving us a way to conceptualize—and tacitly number—them as they crowd her mind beyond what it can retain. In this disjointed exchange, a chaotic model of *Tristram Shandy* in miniature, the maid cannot cluster Walter's commands into discrete (i.e., meaningful) units; his conversational threads lack clear beginnings or ends. Facing too many stimuli, distractions that appear at aperiodic intervals, there is no way for her to "chunk," or cluster, the hubbub. When it's time to baptize the child, Susannah's mind is already chock-full, on the brink of scattering into a half-delivered "'Tis *Tris*——."[32]

The details of how Susannah's mind handles the baby's name illuminate the possibility for working memory overload at a micro level, that of syllable and phoneme. Though initially she recalls only "Tris," later, prompted by the curate's "tram," the maid remembers a "gistus." In his *Grammaire*, Condillac suggests

that a single thought is composed of multiple synchronous ideas, which are only broken down, or *décomposer*, in language: "si toutes les idées, qui composent une pensée, sont *simultanées* dans l'esprit, elles sont *successives* dans le discours" (if all the ideas that compose a single thought are *simultaneous* in the mind, they are *successive* in discourse).[33] Susannah's partial recall illustrates this Enlightenment theory of language. Her jumbled memory of syllables suggests she holds multiple phonological units in mind at once but has trouble putting them in order. To encode this unfamiliar word, the maid first breaks the unfamiliar name into smaller pieces: *Tris-me-gis-tus*, having to juggle the syllables in her head. Next, she must hold these linguistic units in active memory, needing to sustain them in the face of the curate's misleading prompts and insults. Finally, Susannah combines parts of the old (*Trismegistus*) with the new (*Tristram*) to produce the comic hybrid, "Then 'tis *Tristram-gistus*." Processing Sterne's disordered plot forces us to mirror the multifocal dynamics that lead to Susannah's cognitive slip. Extending the conceit of lapsed memory from a name to a novel, Sterne weaves this pattern of overload, forgetting, and reassembly into his work's deep structure, portraying working memory's limits as a, if not *the*, central challenge for the act of reading.

Midway through the first volume, Sterne introduces a character that comments on our overwhelmed state: Madam Reader. When she interrupts the story to demand more coherence, Tristram playfully accuses her of failing to read with enough attention—specifically, for missing the fact that his mother is a Protestant, supposedly offered a few pages earlier. "———How could you, Madam, be so inattentive in reading the last chapter? I told you in it, *That my mother was not a papist.*——Papist! You told me no such thing, Sir. Madam, I beg leave to repeat it over again, That I told you as plain, at least, as words, by direct inference, could tell you such a thing.——Then, Sir, I must have miss'd a page" (40). Madam Reader assumes that she has forgotten something. Overwhelmed by Tristram's prose, she must have failed to notice the hero's reference to his mother's religion or skipped the page entirely. But when Tristram scolds Madam Reader and sends her back to review his last few pages, he is being ironic.[34] Behind Tristram's indignation hides a knowing Sterne, who recognizes how the reader's memory and attention are taxed by his prose. Nobody can handle the text in its entirety, especially when it arrives Shandy-style: disorganized and all at once.

Sterne's broken prose entangles readers in his hero's distraction and overload; according to Tristram, the book will succeed if he can "convey . . . the same impressions to every other brain [as] the occurrences themselves excite in [his] own" (236). To draw us into a similar state, he bombards us with unfinished stories, jumbled syntax, disorganized chapters, and slips of memory. Tristram's "most zealous wish" is to oversaturate readers with wit—and to "pour" narra-

tive upon them until their working memories collapse (141). Supposedly, this onslaught will continue "without stint or measure," packing each reader with as much "as each . . . could bear" and filling "the several receptacles, cells, cellules, domiciles, dormitories, refectories, and spare places of our brains,——in such sort, that they might continue to be injected and tunn'd into, . . . until every vessel of them, both great and small, be so replenished, saturated and fill'd up therewith, that no more, would it save a man's life, could possibly be got either in or out" (141). This passage is a prototypic depiction of what *Tristram Shandy*'s syntax does to readers over time. Our minds are encumbered and "at length fill'd as full of HOBBY-HORSICAL matter as it can hold;——" (55). Tristram's description invites the very breakdown it describes. Rather than adding meaning, his lists ("receptacles, cells, cellules, domiciles, dormitories, refectories, and spare places of our brains") crowd us as the tangled syntax and excessive synonyms willfully exceed working memory. The same is true of the sentence, which, quoted in full, is a true grammatical masterpiece that includes embedded clause upon embedded clause, as well as twenty-nine commas, four dashes, and a parenthetical (a modest count for Sterne). As this multiplicity continues volume upon volume, readers must stretch working memory beyond normal limits, likely to the point of collapse.

The Anatomy of Parallel Processing

> [M]y work is digressive, and it is progressive too,——and at the same time.
>
> —*Laurence Sterne,* Tristram Shandy *(52)*

Walter's main obsession in the months leading up to Tristram's birth is preserving the anatomical integrity of his son's infant brain and avoiding anything that might disorder it. Throughout *Tristram Shandy*, Sterne repeatedly plays on the idea that the brain's anatomical structure is causally linked to characters' eccentric rhythms of cognition. Mr. Shandy claims that "all souls [are] by nature equal," arguing that the "difference between the most acute and the most obtuse understanding" arises "merely from the lucky or unlucky organization of the body" where the soul "took up her residence"—a specific brain region he becomes consumed with locating (106). Having rejected Descartes's placement of the soul on "the top of the *pineal* gland" as too small ("the size of a marrow pea") (106), and having discarded another theory locating the soul in "the occipital parts of the cerebellum" as too shocking, Walter focuses his energy on the idea he finds the least controversial: that the soul's "head-quarters" was "somewhere about the *medulla oblongata*, wherein it was generally agreed by *Dutch* anatomists, that all the minute nerves from all the organs of the seven senses concentered" (107). Amid these anatomical ruminations, which concenter on

the health of Tristram's newborn mind and head, Walter ends up supporting a set of convoluted premises. Believing that the "subtilty and fineness of the [mind] depended upon [maintaining] the finer network and texture in the cerebellum" (107) and that natural birth, estimated as placing "a weight of 470 pounds" upon the baby's head, could endanger the quality of his son's future thought, Tristram's father devotes himself to protecting this "fine-spun web" from such "violent . . . crush" (108). His concern is that excessive compression will produce obstructions in the brain's natural pathways and, by consequence, create odd divots in systematic thought. Physiological blockages in the cerebellum, he imagines, distort the natural flow of the animal spirits and thus alter the rhythm of association and cognition.

Tristram Shandy was clearly written to engage Locke's *Essay Concerning Human Understanding* and its theory of "association of ideas"; however, its narrator's digressions also complicate Locke's traditional transitive model of thought, in which connected ideas travel successively, albeit haphazardly, from A to B, as well as the physiological models that supported it. If Lockean association relied on linear metaphors, seventeenth- and eighteenth-century anatomy offered similar models of the brain's pathways.[35] Herman Boerhaave (1668–1738) visualized the brain's connective tissue as a linear set of channels, imagining that the animal spirits "consisted of the finest of all particles . . . strung end to end" that communicated the impetus of thought "along a nerve fibre much as a line of billiard balls in a tube."[36] These particles' movements could be swift and chaotic, but thoughts still occurred one at a time. Rather than presenting thought as moving in a single associative train, his novel models attention and cognition as inherently simultaneous: a parallel process that is crowded, multiple, and jumbled with gaps. Creating an aesthetic and cognitive landscape where A, B, and C (if not also D, E, F, and G) run in parallel—or, still more interestingly, cluster, nest, splinter, and branch—Sterne stretches syntax and narration to their breaking point to depict chains of simultaneous thought.

The Enlightenment, however, was a period filled with competing models of mind and brain, and Sterne's novel samples from and satirizes many. Though Walter gets their theories topsy-turvy, his invocation of Descartes's description of the pineal gland as the seat of the soul (as well as contemporary research by "*Coglionissimo Borri*, the great *Milaneze* physician" on the "cellulae . . . of the cerebellum") should not to be discarded (107). (As Walter quickly discards one theory, the narrator turns the tables on us, declaring "'twas no bad conjecture" [106].) Indeed, Renaissance physiologist Giovanni Borelli (1608–79), whom Walter rejects, played a key role in resisting the idea that animal spirits traveled through self-contained tubes instead forwarding a theory that compared nerves to semiporous ducts "filled with . . . spongy material . . . moistened with the spirituous juice [*succus nerveus*] of the brain."[37] Borelli described the motion of thought

as a "concussion," "commotion," or "undulation," with cognitive connections occurring at many flexible points of contact and departure. New ideas occur not in a causal chain, but as a result of synchronous thoughts that jar against one another, swell in waves, or collide. By consequence, a "sudden fermentation and ebullition" of animal spirits emerges to fill "up the porosities of the [brain]."[38]

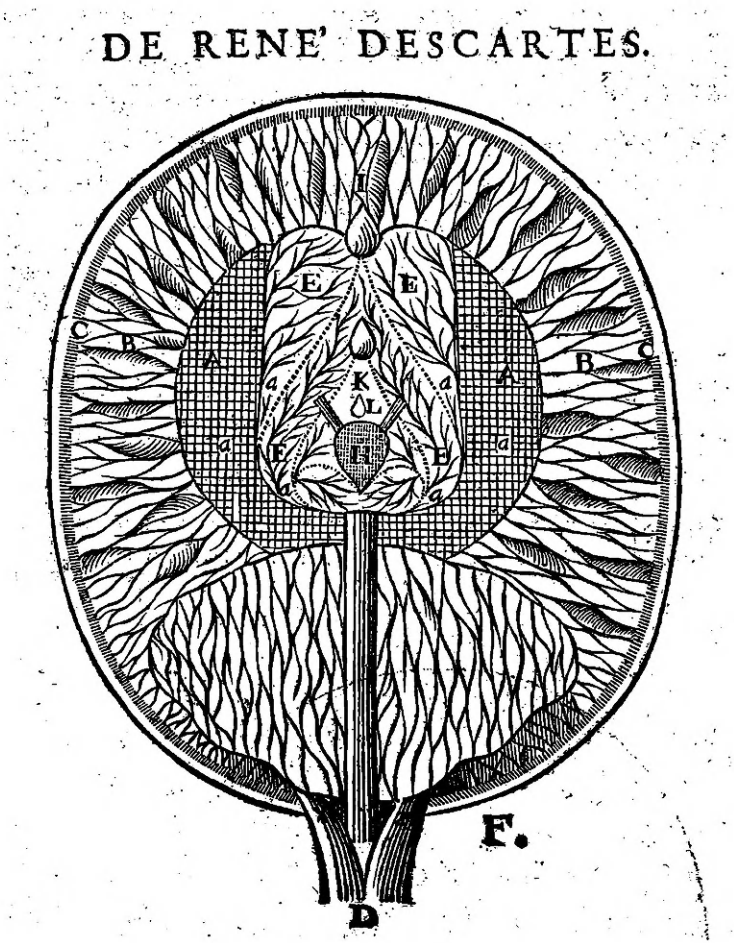
Invoking Borelli, *Tristram Shandy* also experiments with Descartes's theory of superpositional memory, an extension of his treatise *L'Homme*, which argues that folds in the cerebrum's *pia*, or outer surface, allow for overlapping memories: "There is no doubt that the folds of the memory get in each other's way, and that there cannot be an infinite number of such folds in the brain. . . . I do not think that there has to be a very large number of these folds to supply all the things we remember, because a single fold will do."[39] Descartes's anatomy departs from imagining the mind as storehouse to envision memories that crowd within the "*plis de mémoire*," or brain folds.

Again, the language of Walter Shandy's concerns about Tristram's brain proves apt for theorizing the anatomy of multifocal cognition. His worries about the pressure that natural birth places on a baby's head (and the subsequent folding of the brain) reflect his concern that "this force . . . upon the very vertex of the head" could "[injure] the brain," leaving the "intellectual web . . . no better than a puzzled skein of silk,——all perplexity,——all confusion within side" (108). In the ultimate plot twist, however, Walter's attempts to shield Tristram's head only redouble the stress on the newborn skull. Dr. Slop's forceps not only break his nose, but they also compress and disorganize the brain (a squishing of cerebrum, cerebellum, and medulla oblongata) that supposedly yields the narrator's disordered patterns and rhythms of thought.

Ephraim Chambers's description of the brain in 1729 emphasizes this malleability, defining it as a "large, soft, whitish Mass," with an "Exterior . . . *Cortex*" that is "soft and moist" and the "inner Substance . . . more solid."[40] The novel suggests that Tristram may have a few extra wrinkles in his brain; the forceps implicitly crush more than his nose. The result is a parody of the oratorical principles Smollett satirizes in *The History and Adventures of an Atom* (1769):

> He knew when to distract its weak brain with a tumult of incongruous and contradictory ideas: he knew when to overwhelm its feeble faculty of thinking, by pouring in a torrent of words without any ideas annexed. These throng in like city-milliners to a Mile-end assembly [in which ideas] that are uncoupled, press in promiscuously with such impetuosity and in such numbers, that the puny master of the ceremonies is unable to withstand the irruption; . . . they fall into the dance without order, and immediately anarchy ensues.[41]

The pressure on Tristram's head results in "a brain!——upside down!——" in which cells and Borelli's *succus nerveus* "are broke loose one into another . . .



A diagram of the human brain with the pineal gland (H) at its center, from René Descartes's *Treatise on the Formation of the Foetus* (1664). Wellcome Library, London.

jumbled into one mass" (336–37). The Shandean brain intertwines and folds, riddled with overlapping multiplicity.

Madam Reader's complaint about the resulting hubbub—and her confusion despite attention—reflects the experience of engaging with *Tristram Shandy*. The novel is structured to call attention to attention's limitations, or, as Hume would put it, the fact that "the capacity of the mind is not infinite."[42] Given its playfulness, we might be tempted to see this move as mere comedy—another layer of *Tristram Shandy*'s digressive appeal. What interests me here, however, is the precision with which (and the theoretical sophistication that lies behind) the novel's experiments with overloading working memory and attention.

Sterne's work demonstrates how quickly, in trying to handle a too-generous, oft-disordered supply of impressions, our orderly storehouse becomes a leaky vessel. In the process, Sterne develops an aesthetics of distraction, embedding ideas about the interrelationship of memory and attention (and the narrative techniques most likely to overload us) now supported by the neuroscience of attention, memory, and reading.

Working memory's temporary storage system provides the key link between short- and long-term memory in the neuroscience of reading, letting us move between our immediate perception of the current page and memories of the chapters before. As Andrew Elfenbein explains, "working memory . . . allow[s] readers to store, process, and manipulate recently read textual input through such operations as comparison with other parts of the text, retrieval of relevant background knowledge, and the creation of forward and backward inferences."[43] Research by Baddeley suggests there is a strong correlation "between working memory span and reading comprehension."[44] Our ability to hold a subject (noun) in mind while we process subsequent verbs, objects, and clauses allows us to think in sentences, lines, and paragraphs. Complex sentences such as Sterne's increase demand on working memory by creating a situation in which it "may not be possible to process the beginning of the sentence fully until [we] have reached the end."[45] From the novel's start, *Tristram Shandy* challenges working memory, stretching our attention over 145 words:

> I wish either my father or my mother, or indeed both of them, as they were in duty both equally bound to it, had minded what they were about when they begot me; had they duly consider'd how much depended upon what they were then doing;——that not only the production of a rational Being was concern'd in it, but that possibly the happy formation and temperature of his body, perhaps his genius and the very cast of his mind;——and, for aught they knew to the contrary, even the fortunes of his whole house might take their turn from the humours and dispositions which were then uppermost:——Had they duly weighed and considered all this, and proceeded accordingly,——I am verily persuaded I should have made a quite different figure in the world, from that, in which the reader is likely to see me. (1)

Rather than easing us into the novel, this sentence relies on syntactic irregularities that cognitive linguists have shown likely to prompt working memory slips: (1) multiple, incomplete syntactic units;[46] (2) disorganized or poorly subordinated clauses;[47] and (3) irregular rhythmic variations.[48] Sterne's opening combines these, forcing us to manage a high number of disordered, unfinished clause fragments as we try to ground ourselves in the narrative scene. The sentence leverages a chain of semicolons, colons, commas, and dashes, forcing us to hold these parts in mind without being able to integrate them fully.[49]

In a normal sentence, readers manage these challenges with relative ease; we decrease the load on working memory by breaking dense lines into manageable chunks. Sterne's prose, however, rejects subordinated clauses and regular prosody. Unable to easily organize linguistic units for parsing, memory load multiplies. And while three embedded clauses exceed most people's working capacity, Sterne gives us ten, a narrative situation that, Tristram jokes, will have the Reader "cudgel[ing] his brains sore" (264).[50] Contemporary satirist Jeremiah Kunastrokius, seizing on the comic potential of the author's innuendos, recognized the overload in *Tristram Shandy*'s prose: "A Moralist has generally one, two, three, four, five, six, and sometimes more things in view. . . . Mr. *Tristram Shandy* is not among any of these classes.—He stands by himself . . . —tho' but in *twelves*,—*unrivalled*,—*inimitable*,—and (to my . . . readers) *incomprehensible*."[51]

When Tristram scolds Madam Reader and has her "read the whole chapter over again," the critique is tongue in cheek (41). Once she is gone, the hero lets readers in on the joke: he has "imposed this penance upon the lady," we learn, to "rebuke a vicious taste . . . of reading straight forwards" (41). Her confusion derives from a difficulty we all face in reading *Tristram Shandy*. Rereading reflects Madam Reader's false hope that a second look will provide some linearity or clarity. Yet, ultimately, Sterne will not allow this comfort. The novel's ideal reader does not go "straight forwards," but "give[s] up the reins of his imagination into his author's hands" and mirrors Tristram's chaotic mind (133). To be a faulty reader, then, is to be a good reader in Sterne.

The Sermon and Rhythms of Distraction

An image of distraction opens *Tristram Shandy*—or at least its second edition. Though the first, distinctly cheaper version had to get by without an illustration, for the London reprint Sterne banked on his popularity to commission a frontispiece from Hogarth. Able to choose one representative episode to lure readers, Sterne picked the sermon scene, a case of patently unsuccessful oratorical attention. During Trim's reading of the sermon "The Abuses of Conscience," Walter mulls over the rules of oratory; the war veteran, Uncle Toby, thinks of military fortifications; Trim cries for his brother in Portugal; and Dr. Slop nods off in his chair. After an extended round of interruptions, Trim's reading concludes in a moment of absurdist irony: "I like the sermon," says Walter; "'tis dramatic,——and there is something in that way of writing, when skillfully managed, which catches the attention" (101). Per Sterne's request, Hogarth's engraving attempts to capture the scene's rhythms of distraction—where the audience's interruptions of the sermon extend forty-eight pages—in one image. The engraver, however, who bragged about "how few lines" were necessary to portray a character, has been caught in an artistic catch-22.[52] Sterne's invitation is both a bravado insult and aesthetic mousetrap: "I would give both my Ears,"

William Hogarth, *Scene from Sterne's "Tristram Shandy."* Hogarth's engraving can only use the clock in the background to cue the scene's scattered rhythms. Walter and Toby cue their distraction by staring off into space, and though Trim stands at the proper oratorical angle, Slop is sound asleep. Wellcome Library, London.

he claims, for "no more than ten Strokes of *Howgarth*'s Witty Chissell. . . . The loosest Sketch in Nature, of Trim's reading the Sermon to my Father &c."[53] The scene defies being captured in still life.

When the scene opens, Corporal Trim has just begun reading a sermon, "On the Abuses of Conscience," which Sterne himself preached in York in 1750.[54] Though Trim opens "bespeaking attention with a slight movement of his right

hand" (85) declaring "Trust!——Trust we have a good conscience!," Walter immediately distracts him: "Certainly, *Trim* . . . you give that sentence a very improper accent" (88). As proliferating interjections by Walter, Slop, Toby, and Trim take over, their scattered rhythms become the episode's ruling conceit. Sterne uses the pacing of interruption to explore the temporal patterns of distracted listening, dramatizing each audience member's idiosyncratic focus. Instead of merely oversupplying the reader with simultaneous processing, *Tristram Shandy*'s rhythmic asynchrony attacks our working memory capacity at its foundation.

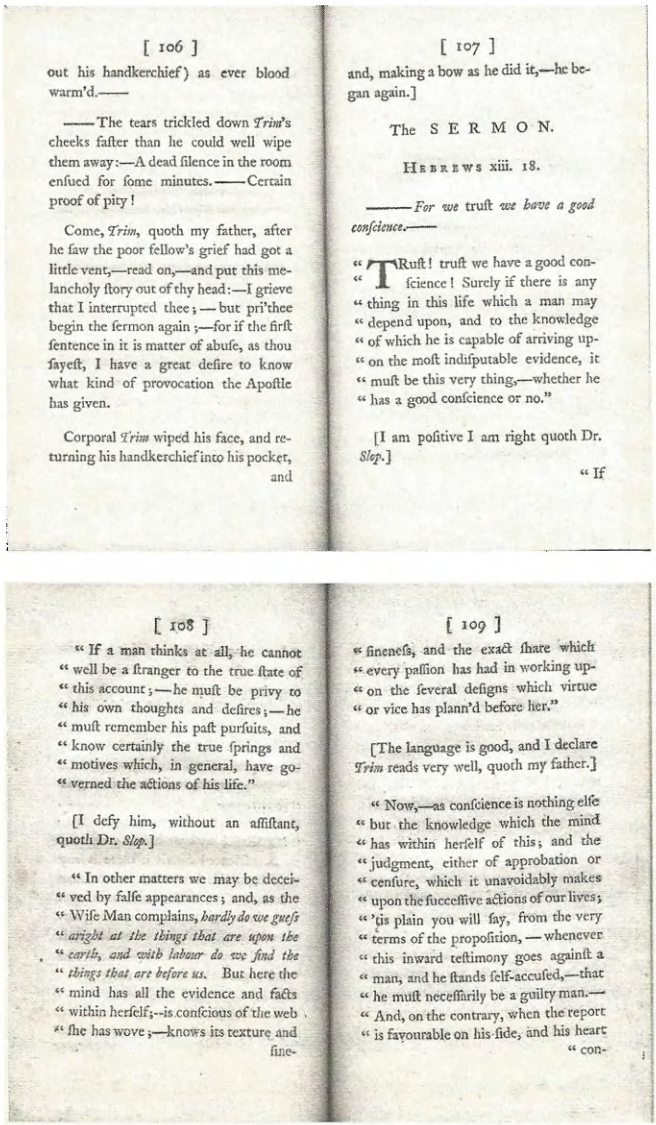
Today we like to imagine the charismatic Sterne as an engaging preacher, but biographers report mixed oratorical success. As his friend John Croft admitted, "half of the Congregation . . . usually went out of Church as soon as he mounted the Pulpit."[55] It is one thing to experience an inattentive audience, noticing a congregation fidgeting during one's sermon. It is yet another beast to evoke this rhythm of distraction in prose. To do so, Sterne must give prose (known, according to Lukács, for "its unfettered plasticity and its non-rhythmic rigour") the sense of a steady tempo from which distraction can deviate.[56]

Sterne's novel manages this dance by setting two rhythms against one another.[57] The sermon provides the background rhythm, while Walter, Toby, and Slop's interjections overlay a second, competing rhythm. After Trim's false start, interruptions initially fall at regular intervals; a paragraph of the sermon can be read before someone interjects again. Typography helps readers distinguish the sermon's flow from the pace of audience distraction. Every line of the sermon appears in double quotes, with every interruption in brackets, highlighting not just where, but when, distraction breaks in.

Enlightenment treatises on grammar, Jill Campbell notes, describe punctuation as linked to oratory, "guiding . . . a written text's return to the realm of sound." A *Treatise of Stops, Points, or Pauses, And of Notes which are used in Writing and in Print* from 1680, for instance, specifies how many beats a reader should pause after a comma, semicolon, colon, and period. A short poem explains the basic rules:

> A Comma is a Breathing Stop: No more,
> Stop at it while you may tell one, Therefore. . . .
> Where Semi-Colon placed is; There you,
> May please to make a Stop, while you tell Two.
> A Colon is a longer Stop; Therefore,
> Stop at each Colon, while you may tell four.[58]

As these verses suggest, regular rhythms—especially iambic pentameter couplets—were thought to be particularly good literary structures for managing atten-



[106]

out his handkerchief) as ever blood warm'd.——

——The tears trickled down *Trim*'s cheeks faſter than he could well wipe them away:—A dead ſilence in the room enſued for ſome minutes.——Certain proof of pity!

Come, *Trim*, quoth my father, after he ſaw the poor fellow's grief had got a little vent,—read on,—and put this melancholy ſtory out of thy head:—I grieve that I interrupted thee;—but pri'thee begin the ſermon again;—for if the firſt ſentence in it is matter of abuſe, as thou ſayeſt, I have a great deſire to know what kind of provocation the Apoſtle has given.

Corporal *Trim* wiped his face, and returning his handkerchief into his pocket, and

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and, making a bow as he did it,—he began again.]

The SERMON.

HEBREWS xiii. 18.

——*For we* truſt *we have a good conſcience.*——

"TRuſt! truſt we have a good con-
"ſcience! Surely if there is any
"thing in this life which a man may
"depend upon, and to the knowledge
"of which he is capable of arriving up-
"on the moſt indiſputable evidence, it
"muſt be this very thing,—whether he
"has a good conſcience or no."

[I am poſitive I am right quoth Dr. *Slop*.]

"If

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"If a man thinks at all, he cannot
"well be a ſtranger to the true ſtate of
"this account;—he muſt be privy to
"his own thoughts and deſires;—he
"muſt remember his paſt purſuits, and
"know certainly the true ſprings and
"motives which, in general, have go-
"verned the actions of his life."

[I defy him, without an aſſiſtant, quoth Dr. *Slop*.]

"In other matters we may be deceiv-
"ved by falſe appearances; and, as the
"Wiſe Man complains, *hardly do we gueſs*
"*aright at the things that are upon the*
"*earth, and with labour do we find the*
"*things that are before us.* But here the
"mind has all the evidence and facts
"within herſelf;--is conſcious of the web
"ſhe has wove;—knows its texture and
fine-

[109]

"fineneſs, and the exact ſhare which
"every paſſion has had in working up-
"on the ſeveral deſigns which virtue
"or vice has plann'd before her."

[The language is good, and I declare *Trim* reads very well, quoth my father.]

"Now,—as conſcience is nothing elſe
"but the knowledge which the mind
"has within herſelf of this; and the
"judgment, either of approbation or
"cenſure, which it unavoidably makes
"upon the ſucceſſive actions of our lives;
"'tis plain you will ſay, from the very
"terms of the propoſition,—whenever
"this inward teſtimony goes againſt a
"man, and he ſtands ſelf-accuſed,—that
"he muſt neceſſarily be a guilty man.—
"And, on the contrary, when the report
"is favourable on his ſide, and his heart
"con-

In *Tristram Shandy*'s early editions, double-quotations cue Trim's reading of the "Abuses of Conscience" while interruptions appear in brackets, separated from the rest of the text by an extra space. This example comes from volume 2 of the first edition of Sterne's *The Life and Opinions of Tristram Shandy, Gentleman* (York: Printed for Ann Ward, 1760), 208–9. Courtesy Special Collections, Michigan State University Libraries.

tion. The idea that poetry, and similarly rhythmic forms (such as sermons), could structure concentration stretches back to the Renaissance. According to Juan Luis Vives's *De Anima et Vita* (1538), "The stronger the associative bonds between successive elements of to-be-learned items, the better the learning of them: thus verse is easier to learn than haphazard prose."[59] Christopher Pitt's translation of Marco Vida's *Art of Poetry* (1725)—appropriately in couplets—imagines that poetic structure saves readers from the overwhelming multiplicity of narrative:

> Where chance presides, all *objects* wildly join'd,
> Crowd on the reader, and distract his mind;
> From *theme* to *theme* unwilling is he tost,
> And in the dark variety is lost.[60]

In poetry's constrained rhythm and meter, Pitt finds a remedy to the chaos of ideas represented by Vives's "haphazard prose." Couplets, like the homily's paragraphs, structured the chaos of cognition into congruent forms. The ability to model rational thought processes through the structured rhythms of verse supposedly keeps the reader from being "tost" into a crowd of unrelated ideas and "lost." In *The Temple of Nature* (1803), Erasmus Darwin, grandfather to the famous Charles, rendered this idea explicit, teaching theories of chemical bonding by translating them into couplets:

> Press drop to drop, to atom atom bind,
> Link sex to sex, or rivet mind to mind;
> Attend my song!—With rosy lips rehearse,
> And with your polish'd arrows write my verse!—
> So shall my lines soft-rolling eyes engage,
> And snow-white fingers turn the volant page;[61]

The poem's iambic pentameter couplets (bind/mind, rehearse/verse, engage/page) have a similar power over focus, leaving readers bound, riveted, and ensnared.

In *Tristram Shandy*, where "all *objects* [are] wildly join'd," the sermon's paragraphs have the same power as poetic couplets, at least at first. In Sterne, however, no mind is allowed to be "rivet[ed]" long. As Walter, Toby, and Slop's interjections become more frequent, they fall at unexpected beats, perturbing and accenting the sermon's cadence. Here, Sterne seeks to capture the irregular beat of scattered focus *en groupe*, crafting complex rhythms to evoke each character's idiosyncratic cognitive tempo and pattern of attentional capture. In Hume's *Treatise*, such irregular rhythms were described as emerging from contrasting tempos of thought and passion, which created cognitive dissonance within one person's brain. As Trim reads, Sterne experiments with varying these

prose rhythms to convey the eccentricities of each character's mind, collectively revealing the cognitive dissonance of the crowd.

Hobbyhorses and the Individual Beat of Interest

> De gustibus non est disputandum;
>
> —*Laurence Sterne,* Tristram Shandy *(8)*

As Tristram reminds us, there is no disputing about tastes. Each character in *Tristram Shandy* is granted a hobbyhorse (or two) to ride throughout the sermon, giving each figure a distinctive rhythm of attention. Walter is obsessed with rhetoric; Uncle Toby is consumed with military history; Dr. Slop, a Catholic, interprets references to the Apostle Paul as attacks on popery; even Corporal Trim, the one reading the sermon, can't stop thinking about his brother. Each character has a pet topic primed for auditory selection, and each perceived reference to it inspires a new tangent. Cognitive scientists call this bias the *cocktail party phenomenon*: the fact that in noisy environments "highly pertinent stimuli such as one's own name can suddenly capture attention."[62] Our focus is drawn to things we care about, particularly ourselves.

After Trim's opening "Trust!——Trust we have a good conscience!," Walter interrupts to comment on the corporal's inflection: "Certainly, *Trim*, quoth my father, interrupting him, you give that sentence a very improper accent . . . as if the Parson was going to abuse the Apostle." The implied link between the Apostle Paul and Catholicism leads Slop to his favorite topic: "Sir, quoth Dr. *Slop*, *Trim* is certainly in the right . . . the writer (who I perceive is a Protestant) . . . is certainly going to abuse him" (88). When Toby hears that conscience "*shall tell him more than seven watch-men that sit above you upon a tower on high*," the military references are too much (95). He rests two words and a dash before leaping in: "——[A tower has no strength, quoth my uncle *Toby*, unless 'tis flank'd]" (95).

Interjections no longer fall at a paragraph's end but enter erratically in the middle of the sermon's paragraphs and sentences to produce irregular syncopations. Take Dr. Slop's rapid return to alertness amid his midsermon nap. The sermon has just invoked an imaginary doctor and banker to make a point about the biasing force of individual interest. The words "call in" and "physician" shock him awake, triggering Slop to interject before the sentence is completed, "I know the banker I deal with, or the physician I usually call in [There is no need, cried Dr. *Slop*, (waking) to call in any physician in this case] to be neither of them men of much religion" (97). Always falling at different points in time, the audience's points (and rhythms) of interest are out of sync, not only with the sermon, but with each other. Walter's beloved philosophers thus fail to spark Toby's interest: "Whether

they were above my uncle *Toby*'s reason . . . or that his brain was like wet timber, and no spark could possibly take hold,——or that it was so full of saps, mines, blinds, curtins, and such military disqualifications to his seeing clearly into [their] doctrines,——I say not" (171–72). If what gets the attention of one brother will not catch the other, the focus of a group must be still more scattered.

According to music historian Matthew Riley, one of the great challenges for eighteenth-century concertmasters was that audience enjoyment was ruled by the relative "interest *(Interesse)* aroused in the listener."[63] Johann Forkel (1749–1818), director of the University of Göttingen's annual concert series, declared that this problem presented an almost insurmountable hurdle when it came to choosing music: "How . . . should one arrive at a choice which interests every listener, when the diversity among them . . . means that probably the very thing that most interests one person and gives him the most pleasure intensely displeases another and so does not interest him at all?"[64] Suggesting that audiences were vulnerable to idiosyncrasies of attention, Sterne and Forkel challenged a basic principle of classical oratory.[65] Cicero's ideal orator was confident that perfected rhetoric would not only "captivate" men but "rule and sway men's minds"; Sterne's novel suggests that men's minds were going to drift no matter what, moving in and out of focus at unpredictable intervals.[66]

According to Hugh Blair, the pulpit orator faced a rhetorical situation even more difficult than that of the concertmaster: though "[h]is subjects of discourse are . . . noble and important; . . . they are [also] trite and familiar" and "the public ear is so much accustomed to them" that it requires far "more than . . . power of genius to fix attention."[67] Dr. Slop models his inability to be captivated by falling asleep as the homily reaches its rhetorical peak. (One parish in York even hired men to wake up nodding parishioners. A Thomas Pawson is recorded as being paid in 1711 "for awakening those who sleep in church"; in 1725, one John Rudge bequeathed "twenty shillings a year to [his parish] to fee a poor man to go about the church and keep the people awake.")[68] In Sterne, Slop's nap breaks the sermon's rhythm just as Trim speaks about our supposedly infallible attention to moral rectitude: "Let CONSCIENCE determine the matter upon these reports;——and then if thy heart condemns thee not . . . the rule will be infallible;" [Here Dr. *Slop* fell asleep] "*thou wilt have confidence towards God*;——that is, have just grounds to believe the judgment thou has past upon thyself, is the judgment of God; and nothing else but an anticipation of that righteous sentence which will be pronounced upon thee [in the] hereafter" (95). In nodding off, Slop mirrors sleeping conscience and reinforces Sterne's point about our selective blindness to personal failings: we are as likely to rationalize our vices as to condemn our sins. Inattention is at its height when we focus on personal morality.

Irregular Distraction: The Tempo of Cognitive Overload

> [An] infinite number of particulars [will] distract the attention, and overload the memory.
>
> —*Dugald Stewart*[69]

Minds, Sterne suggests, never move at regular tempos, or in four-four time. As we near the chapter's end, Sterne breaks the sermon's rhythm and the rhythms of distraction to craft a final prose rhythm that radically undercuts the reader's ability to chunk information in working memory. By the finale, it is almost impossible to follow the threads of the sermon—or the scene—at all.

Cognitive science confirms what philosophers and poets since Vives have suggested: regular rhythms (such as iambic pentameter couplets or the temporal organization of a sermon) structure cognition and facilitate comprehension, guiding our attention in time. Neuroscientific research on rhythm, attention, and language processing has shown that rhythm helps listeners predict when events are going to occur, helping us recognize paragraph breaks, the beginning and end of sentences, points of focus within a phrase, etc.[70] If eighteenth-century poets like Pitt and Darwin illuminate this cognitive principle, *Tristram Shandy* violates it to overwhelm the reader, particularly as the sermon scene reaches its climax.[71] Dr. Slop initiates the episode's rhythmic proliferation and concomitant disintegration. Hearing the word "*Romish*," his quick reactivity to the homily's (now palpable) anti-Catholicism leads him to jump in twice in midparagraph, fragmenting the sermon's rhythm to leave it nigh incomprehensible: "*This likewise is a sore evil under the sun*; and I believe there is no one mistaken principle which, for its time, has wrought more serious mischiefs.——For a general proof of this,——examine the history of the *Romish* church;——[Well, what can you make of that? cried Dr. *Slop*] ——see what scenes of cruelty, murders, rapines, blood-shed, [They may thank their own obstinacy, cried Dr. *Slop*] have all been sanctified by a religion not strictly governed by morality" (98). It is hard enough to follow one rhythmic thread when it's being interrupted; yet it is far more complicated to manage two asynchronous rhythms, much less ones that change and devolve. This is precisely what Slop's eccentric comments inspire; no longer restricted to one-liners, interruptions cluster in erratic bursts. An argument over Catholicism, which begins with a midsentence interruption by Slop, devolves into a debate over the precise number of Catholic sacraments that extends in the London edition for thirty-five lines across two pages before disintegrating into the nonverbal: "——Humph!——said my uncle *Toby*. . .——Humph! replied my uncle *Toby*. . . . ——Humph! replied Dr. *Slop*." (92). Interruptions multiply, soon arriving fast and furious enough to supplant the sermon as the driving rhythm. The novel uses Corporal Trim to conduct (and reign in) the changing tempo of distraction,

"waving his right-hand from the sermon to the extent of his arm, returning it backwards and forwards to the conclusion of the Paragraph" (98). Serving as a human metronome, Trim provides some rhythmic structure; however, the corporal, still reading, has now become the central source of interruption, convinced that each reference to torture applies to his brother in Portugal. In the ensuing cacophony, Sterne sets sermon against interruption and interruption against sermon to crescendo in an intricate—and taxing—mixture of narrative times:

> "To be convinced of this, go with me for a moment into the Prisons of the inquisition.——[God help my poor brother *Tom.*]——Behold *Religion*, with *Mercy* and *Justice* chained down under her feet. . . . [W]hat a piteous groan! [Here *Trim's* face turned as pale as ashes.] See the melancholy wretch who utter'd it"—— [Here the tears began to trickle down] just brought forth to undergo the anguish of a mock trial, and endure the utmost pains that a studied system of cruelty has been able to invent.——[D—n them all, quoth *Trim*, his colour returning into his face as red as blood.]——Behold this helpless victim delivered up to his tormentors,——his body so wasted with sorrow and confinement.——[Oh, 'tis my brother, cried poor *Trim* in a most passionate exclamation, dropping the sermon upon the Ground.] (99)

Here, readers encounter rhythms completely out of phase, yielding peak disorientation. As Klapp et al. explain, people have "remarkable difficulty generating two responses that must follow different temporal sequences, unless the temporal patterns are simply related (e.g., periods in 2:1, 3:1 relation)."[72] We may be able to follow one interrupted rhythm, but not two idiosyncratic ones that are complex and not in sync.

In 1792, Forkel warned that certain musical periods could overstrain focus: "Since every musical period of even a moderate length strains the listener's attention should he follow it in all its smallest parts . . . , the highest possible distinctness and clarity are necessary in the construction of periods, because without them the listener becomes either tired or distracted, and consequently is in no condition to follow the course of the whole."[73] His contemporary Heinrich Christoph Koch urged composers to keep metrical relationships simple to improve audience concentration: "The relation of the connected section or bars [in a period] must not be partly equal and partly unequal. . . . [A]s soon as the connected number of metrical feet is too great with respect to their relations, the period formed from the individual phrases becomes insufficiently comprehensible; the comparison of its parts requires too much attention."[74] The sermon's conclusion violates these rules of rhythmic simplicity from every angle; unequal ratios repeatedly require "too much attention," a narrative asynchrony crafted around overload. Sterne's contemporaries recognized the power

of the novel's tempos to distort cognitive time. The satiric *The clockmakers outcry* (1760) declared *Tristram Shandy*'s "internal scheme" was to bring "clocks and watches" into contempt, leaving no one with any sense of "how the time goes": "Time's out of rule; no Clock is now *wound-up*: / TRISTRAM the *lewd* has *knock'd* Clock-making up."[75]

Yet in experimenting with rhythms and tempos at the edge of comprehension —testing the boundaries of something Rousseau declared had "no limits other than [what] the ear is not capable of perceiving"—Sterne was in good company.[76] In 1775, Haydn premiered his Symphony no. 65 in A Major, the *Tempora Mutantur* (Latin for "times change"). Deploying sudden interruptions, volume shifts, and surprising beat placements to upset our sense of steady rhythm, Haydn's symphony sought to create the illusion of a time and tempo in constant flux. Like Sterne, Haydn's work is crafted around "interruptions on a grand scale"; as Elaine Sisman notes, he abandons "conventional phrase-rhythm" and repeatedly violates expectation to give listeners the impression that "time is out of joint."[77] By the 1770s, musicologists had begun to suggest such rhythmic variability could have advantages as well as costs for sustaining listener attention. John Holden claimed, "The attention is kept in suspense, by the cadence usually called *irregular*." In order to obtain a "more connected succession of chords . . . not wanting in variety," he writes, "it is necessary to admit of other kinds of cadences, *besides the perfect* . . . some of which serve to suspend, and some to disappoint the natural expectation of the ear, so as not to suffer our attention perfectly to settle."[78]

In *Tristram Shandy* Sterne mastered the art of suspending readers' attention. Stretching attention to breaking point, he imagined, is the key to accessing the elusive power of distraction. Though off beat with the sermon, the interjections from Trim's audience are oddly on point. Toby's tangent about military guard ("A tower has no strength . . . unless 'tis flank'd") reinforces the sermon's message about the unreliability of conscience. Slop is right to pounce on the homily's attacks on Catholicism, an ironic reference to Protestants' unwillingness to see immorality closer to home. Trim's distracted orchestration, interspersed with weeping, enacts the sympathetic engagement the sermon's end is meant to inspire; even Walter's concentration on the sermon's oratory—the power of its accents, its language, and its flow to capture attention—focuses on the point of "The Abuses of Conscience" when incorporated in *Tristram Shandy*. According to Archbishop Josiah Hort, every homily had a kernel of worth that a "Man . . . with an honest Heart" could extract with due focus: a preacher could be boring, but it "must be a very dull Sermon indeed, out of which he can pick nothing . . . worth his Attention."[79] Sterne reverses this principle; every moment of distraction can be put to good use.

Rhythms of the Brain: Creativity and the Timing of Distraction

> Digressions, incontestably, are the sunshine;——they are the life, the soul of reading;——take them out of this book for instance,——you might as well take the book along with them.
>
> —*Laurence Sterne,* Tristram Shandy *(52)*

The sermon scene in *Tristram Shandy*—simultaneously a diversion from a dissertation on "trade" that has digressed into the history of military fortifications, a distraction from the hero's birth upstairs, and a commentary on overload—serves, Homer Obed Brown notes, as "a figurative repetition of the text as a whole."[80] The sermon enters the scene by falling from the pages of an unrelated book, where the scatterbrained Parson Yorick had "carelessly popp'd" it in an "act of forgetfulness, to which he ever was subject" (102). To focus on our struggle to read the sermon, discounting the diverted audience is to miss the point. Just to call their comments *distractions* assumes they're not what we're supposed to be attending to. If we flip the rhythmic foreground and background, a new picture emerges.

Before describing digressions as "the sunshine;—— . . . the life, the soul of reading" (and integral to his novel), Tristram makes his first attempt to outline Toby's "most whimsical character," a project derailed by Aunt Dinah and a coachman, leading us "a vagary some millions of miles into the very heart of the planetary system" (51). Yet he claims the sketch of his uncle has gone on all the while, leaving us more familiar with the man than we were at the outset. The anecdote exemplifies the dueling rhythms that govern his narrative structure as well as their creative force when set in opposition:

> By this contrivance the machinery of my work is of a species by itself; two contrary motions are introduced into it, and reconciled, which were thought to be at variance with each other. In a word, my work is digressive, and it is progressive too,——and at the same time.
>
> This, Sir, is a very different story from that of the earth's moving round her axis, in her diurnal rotation, with her progress in her elliptick orbit which brings about the year, and constitutes that variety and vicissitude of seasons we enjoy;——though I own it suggested the thought,——as I believe the greatest of our boasted improvements and discoveries have come from some such trifling hints. (52)

In *Rhythms of the Brain*, György Buzsáki suggests the best way to think about brain function is in terms of such multitiered periodicity, "a hierarchy of multiple parallel loops" that orchestrate cognition.[81] Sterne's novel offers us a similarly intricate vision of narrative structure, joining the metaphorics of periodicity—

from the digressive and progressive motion of his anecdote about Toby to "diurnal rotations" and planetary orbits—to describe the process that leads to discovery. If, in Buzsáki, the focus is on neural synchrony, the "trifling hint," in *Tristram Shandy*, relies on the productivity of discordant cycles. The novel is built around tiers of narrative asynchrony, in which Shandy's tale, which cannot "stop two moments," simultaneously pauses narrative time to allow the narrator to acknowledge the five volumes' worth of reading time he and the reader have already spent together, asking the reader to sit on previous volumes "(do, Sir, sit down upon a set——they are better than nothing)" in order to "look back upon the country [they've] pass'd through" (287). Each has its own unfinished rhythm that collides with the next—rendered creative—at different levels on different timescales at any point within the narrative.

We now so often associate distraction with creative genius that it is hard to remember that this idea has a history. According to psychologist Anton Ehrenzweig, "All artistic structure is essentially 'polyphonic'; it evolves not in a single line of thought, but in several superimposed strands at once. . . . Creativity requires a diffuse, scattered kind of attention."[82] For much of the eighteenth century, however, writers claimed the key to innovation was singular focus. "[I]f there be any thing that can be called *genius*," declares Thomas Reid, thinking of Isaac Newton, "it consist[s] chiefly in being able to give that attention to the subject which keeps it steady in the mind. . . . [T]o one who complimented him upon the force of genius, [Newton] made this reply. . . . That, if he had made any improvements in those sciences, it was owing more to patient attention than to any other talent."[83] Yet in the 1760s and 1770s, writers increasingly associated genius with distraction.[84] Not coincidentally, Sterne's decision to break novelistic convention to develop an aesthetic of overload made him famous. One reviewer claimed the novel's "scatter[ed]" prose was the source of its charm, describing *Tristram Shandy* as a "potpourri filled with a host of digressions," whose rhythms "come [and go] suddenly, without rhyme or reason."[85] Contemporaries recognized that the dash-filled sentences of *Tristram Shandy* had reshaped the novel's form. Even those who hated the novel conceded his rendering of distraction was worth noticing. Samuel Richardson, who abhorred the book, admitted that Sterne's "[u]naccountable wildness; whimsical digressions; [and] comical incoherencies" had "an air of novelty [that] has catched the reader's attention."[86] Sterne's prose style had made him a "great Original."[87]

Sterne broadcasted, even basked in, his scatterbrained tendencies. In his rise to fame, he appropriated the rising link between distraction and brilliance, crafting his public image around his distracted characters. Many of his letters are signed "Tristram"; his collected sermons are attributed to Yorick, the parson who leaves sermons in books and loses no opportunity for "scattering his wit and his humour" (19). Sterne's biography emphasizes his absentmindedness.

According to anecdotes circulated by John Croft, as Sterne "was going over the Fields on a sunday to preach . . . his Pointer Dog sprung a Covey of Partridges, [and] he went directly home for his Gun" to shoot, leaving "his Flock [waiting] in the Church, in the lurch."[88] Coleridge defended these presumed oddities, insisting that their "digressive spirit [is] not wantonness, but the very *form* of . . . genius."[89] According to Sir Walter Scott, the impulsive Sterne was "one of the most original [literary] geniuses, whom England has produced."[90]

Noam Chomsky once said, "[I]t is quite possible . . . that we will always learn more about human life and human personality from novels than from scientific psychology."[91] In carving out a language and a rhythm to enact cognitive overload, Sterne's novel played a pivotal role in the history of attention, testing the limits of working memory and our ability to process discordant rhythms in order to spearhead a cultural revaluation of distraction. More important, Sterne draws on literature's power to model cognition, developing a plot and style to generate the processes and breakdown he theorizes. The ideas expressed in *Tristram Shandy* grew increasingly popular within scientific circles at the end of the eighteenth century. In the 1790s, Erasmus Darwin translated Sterne's ideas about parallel processing in his medical treatise, *Zoonomia* (1794). Drawn, like Sterne, to models of the brain able to accommodate simultaneous cognition, Darwin imagines the mind as a branching, fiber-based organ, in which association and attention are intrinsically multiple. *Zoonomia* focuses on the implications of multifocal cognition for theories of association. To explain the connection between thoughts, he offers the following: "All the fibrous motions . . . which are frequently brought into action together, either in combined tribes, or in successive trains, become so connected by habit, that when one of them is reproduced the others have a tendency to succeed or accompany it. . . . [M]any of our ideas are originally excited in tribes."[92] *Zoonomia* evokes a mind full of compound clusters, or "tribes," of ideation; crucially, these fibrous motions are "brought into action *together*." Like thinkers from Descartes to Sterne, he conceptualizes association as a simultaneous process: a concatenation of cognitive motions that synchronize to yield new ideas. In his poem *The Temple of Nature* (1803), Darwin uses couplets to make this point:

> Last, in thick swarms ASSOCIATIONS spring,
> Thoughts join to thoughts, to motions motions cling;
> Whence in long trains of catenation flow
> Imagined joy, and voluntary woe.[93]

For Darwin, multifocal processing is fluid; "thoughts join" (in nigh-infinite permutations) to other "thoughts." Association becomes a "thick swarm" of parallel processes, a network with unprecedented flexibility from which new "associations spring."

Over the course of the nineteenth century, Sterne's ideas about multifocal attention would wax and wane in popularity only to be taken up once again by cognitive science. Derived from billions of flexible, evolving neuronal connections, the brain's synaptic networks are now modeled as a massively parallel system. The dominant contemporary metaphor, notes David Lodge, is computational: "a *parallel* processor running many programs simultaneously . . . a complex system of billions of neurons between which countless connections are being made."[94] Cognitive scientists Raja Parasuraman, Michael Posner, and Thomas Brown use attention's movements in time to illustrate the neural dynamism of focus. Each describes attention as a continuous, multilayered process—the process of focusing on the right things, at the right time, at the right speed—that allows us to adapt to the shifting conditions and demands of our environment:

> Raja Parasuraman: "Attention is not a single entity but the name given to a finite set of brain processes that can interact, mutually and with other brain processes, in the performance of different perceptual, cognitive, and motor tasks."
>
> Michael Posner: "Attentional orienting can be defined as the set of processes by which neural resources are deployed selectively . . . on the basis of changing motivation, expectation, or volition in order to optimize perception and action."
>
> Thomas Brown: "The continuous process of attention involves . . . focusing and shifting focus, regulating alertness, sustaining effort, and regulating the mind's processing speed and output. . . . [A]ttention is essentially a name for the integrated operation of the executive functions of the brain. . . . [Distraction marks the failure] to activate and manage these functions in the right way at the right time."[95]

Distraction is still portrayed as failure or at least a mark of cognitive inefficiency; the neural networks involved in the executive functions have failed to shift the mind's focus appropriately to concentrate on the "right" object or task at the "right" time. But distraction is not the opposite of attention; it simply marks a disruption, or pattern of clustered disruptions, in its rhythms.

As Sterne recognized, the best way to demonstrate connections in a complex system is to show where—or, better, *when* and *why*—they break down. Neuroscientists ranging from those studying optical illusions to those using methods that temporarily disrupt neural function, such as transcranial magnetic stimulation (TMS), suggest the best way to reveal a link in a massively parallel network is to disrupt it. It is one thing, Sterne knew, to state that there are limits on simultaneous processing, that rhythm helps us organize daily experience, or that we rely on temporally structured narratives to construct meaning. It is quite another to disturb these principles of order, as *Tristram Shandy* does, so that we viscerally experience their importance. Sterne's system orchestrates their

tiered—comically synchronized—breakdown, only to have the narrator comment, with a laugh, on our confusion, leaving us in disarray before he begins anew. Here, we experience their necessity, not just to handle intricate systems or manage extreme cognitive load, but to read (or think coherently) at all.

"Upon first picking up Sterne's *Tristram Shandy*," Viktor Shklovsky notes, we are meant to be "overwhelmed"; "Sterne pulls out all the stops in his ingenious attempt to confound the reader."[96] His novel's mechanics, "progressive" and "digressive . . . at the same time," theorize the bidirectional relationship between rhythms of distraction and overload. In the first, Tristram, with a brain predisposed to simultaneous processing, refuses to inhibit distraction or diversion. By consequence, he repeatedly exceeds his (and others') working memory capacity, producing scattered dashes and rhythms. In the second, the directionality of this process reverses. Scattered rhythms undermine both characters' and readers' ability to chunk information, overwhelming their capacity for fluid cognition and connected thought.

The first process, in which overload produces scattered rhythms, is the focus of much modern research on working memory. Testing or exceeding our capacity to hold things in mind, this work seeks to assess the underpinnings of working memory, both at a structural (anatomical) and a functional (process-based) level. In the spotlight model of attention, it was more difficult to see the connections between research on focus and working memory. Yet, as in the eighteenth century, the move toward parallel processing models inspired frameworks interested in linking attention and memory to understand simultaneous cognition. Cowan and Engle, for instance, conceptualize working memory as an attentional process that allows for and places limits on how much information individuals can hold in mind without overload.[97]

The second process, in which irregular rhythms yield cognitive overload, is now a key point of interest in studies of time and rhythm perception, a body of work increasingly connected to attention studies. This research explores how environmental rhythms structure attention and how temporal patterns shape cognitive processes, including working memory, and facilitate our ability to construct meaning. To understand how rhythm helps us coordinate information in time in distraction-rife environments, researchers often introduce irregular rhythms to probe the limits and the nature of cognitive capacity. As Lashley noted in his seminal article "The Problem of Serial Order in Behavior," "rhythms tend to spread to almost every other concurrent activity. One falls into step with a band, tends to breathe, and even to speak in time with the rhythm. The all pervasiveness of the rhythmic discharge is shown by the great difficulty of learning to maintain two rhythms at once, as in [tapping] three against four with the two hands."[98] Disrupting this system, research shows, affects far more than our processing of complex auditory rhythms; it can distort basic speech

processing, scattering attention until we can no longer comprehend words. Listeners may have expectations about *what* they will hear, but if they don't know *when* to target their attention, they will miss salient points, unable to locate or combine words and phrases into larger units of meaning.

In a novel already out of order, in which a preface appears in volume 2, Sterne's dashes model a narrative asynchrony that further distorts readers' ability to produce meaningful order. If our understanding of a novel relies on organizing its parts to create a coherent story world, Sterne's chaos renders readerly lapses inevitable, one of the few expected element of his narrative. In Haywood, readers' situational awareness is simply partial, Miss Betsy's inattention leaving gaps for us (or the narrator) to fill. Sterne's novel, by contrast, is plotted around repeated and intentional overload, distorting time sense on multiple levels to leave readers who crave linearity, like Madam Reader, with a fragmented model of *Tristram Shandy*'s volumes more like Susannah's scrambled *Tristram-gistus* than a coherent whole.

Normal brain function relies on neural synchrony, in which billions of moments of synchronous neural processing co-occur across multiple spatial and temporal scales to facilitate cognitive functioning. When this synchrony breaks down, so does normal brain function, altering a range of processes. When chronic, these rhythmic irregularities are seen as diagnosable. If those of the eighteenth century thought of the "shatterbrained" as prone to a habit of distraction that teetered on the edge of madness, today we categorize such individuals as having ADHD, or attention deficit/hyperactivity disorder. The fifth and most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) lists "wandering off task, lacking persistence, having difficulty sustaining focus, and being disorganized" as characteristics that present in attention deficit, emphasizing that these are not "due to defiance or lack of comprehension. . . . In adults, hyperactivity may manifest as extreme restlessness or wearing others out with their activity."[99] Tests to confirm diagnosis, such as the TOVA (test of variable attention), assess the presence of rhythmic irregularities as markers of attention deficit. Yet this framing of scattered attention as pathology is matched by a strain of research interested in distraction's role in creativity. According to Allan Snyder, for example, scattered focus brings in a wider range of ideas for processing, increasing our facility in synthesizing seemingly disparate concepts.[100] Modulating attention to accommodate distraction may in fact promote cognitive fluency and increase creativity.[101]

Tristram Shandy's sympathetic—even celebratory—portrayal of distraction embodies a shift in eighteenth-century attitudes about attention. In this, Sterne was still an outlier. Tolerance for distracted congregations, as one might imagine, was rare in the church; his contemporary, William Leechman, argues that a preacher should make it his "perpetual care, to confine and fix the at-

tention."[102] Sterne's rhythms of distraction, however, turn toward recognizing not only the limits of focus but the benefits of its idiosyncrasy. Distraction—creative, comic, mad—becomes an integral part of Sterne's legacy. The spirit behind *Tristram Shandy*'s celebration of distraction and the model of creativity it emblematized would extend into the twentieth century, influencing multiple bodies of neuroscientific research on attention. Yet so too would the traditional model of attention, with its emphasis on endurance and focal strength. As Jane Austen will show, nineteenth-century writers inherited the ability to tap both paradigms. Her novels harness attention's virtues *and* distraction's quickness to develop a multifaceted system of characterization for the realist novel.

Fixated Attention

The Gothic Pathology of Single-Minded Focus

In 1726, "The Microscope," a poem by Richard Pack, appeared on the scene of eighteenth-century pornography, capitalizing on the onanistic potential of the focus being trained (and exacerbated) amid the century's newly domesticated scientific technologies.[1] As the magnification-obsessed father, consumed with observing "Flies and Maggots," fails to notice the rising sexual frustration of his unmarried daughters, his instrument becomes both the aesthetic vehicle for transgressive erotica and a cultural critique on the dangers of selective attention (41). Curious about "the true standard manly Size," Sally and Jenny borrow the microscope one night to conduct their own experiment, viewing their sleeping brother's "bold *Priapus*" (42):

> An Instrument was on the Table,
> Pray don't imagine this all Fable;
> With which their Sire was wont to pore
> On Flies and Maggots by the Hour:
> For he was one of those shrewd Elves,
> Who study all things but themselves,
> . . . . . .
> The Girls more prudent would reduce
> Philosophy to common Use. (41–42)

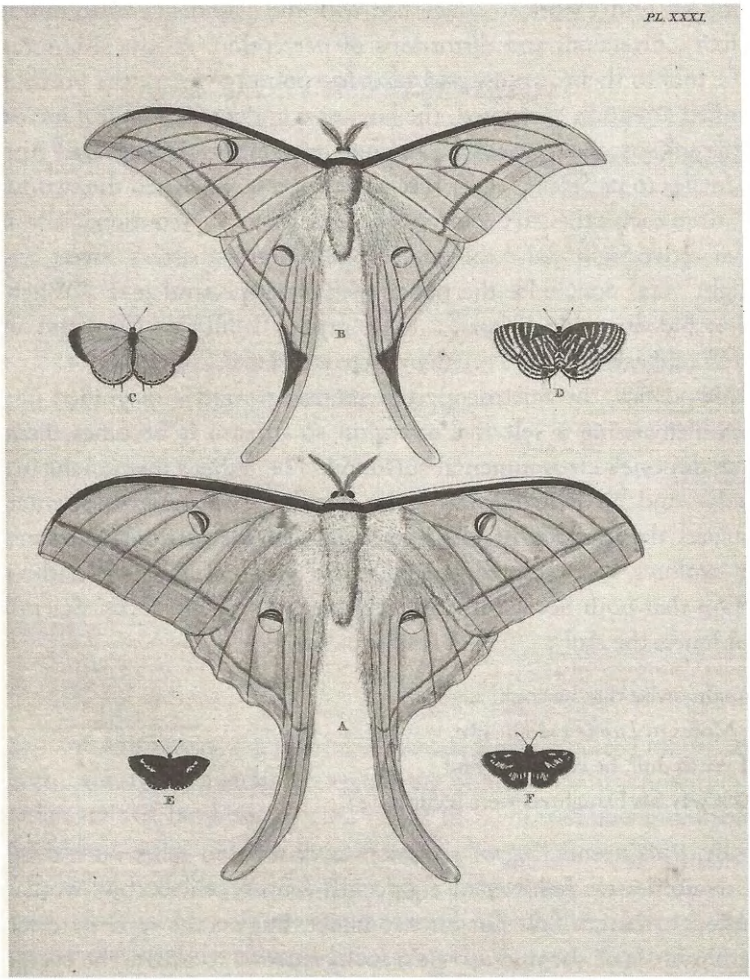
Rarely do we find a work so concerned with the dissonance surrounding cognitive fixity, diversion, and distortions of perception. As the sisters turn the scientific tool to their own use and sexualize points of focus, the poem depicts a magnified attention corrupted; the boy's size undergoes a radical increase beneath the microscope: "The Tube plumps up the nervous Feature, / And adds twelve Inches to its Stature" (42). This distortion recurs when the two turn the "Glass" onto each other to explore their capacity for penetration; Sally, having "fix'd her active Sight" (and the microscope) upon her sister's "sweet Fountain of Delight" (42) concludes the poem with a perspectival joke: "When lo! it yawn'd so hideous wide, / That . . . *Sally* cry'd, / To fill that Gap, and end thy Cares, / Would ask more . . . . . than there are Hairs" (43).

In this poetics, the microscope tips its user toward a magnified onanistic state, emblematizing a selective attention so intense it becomes distraction and excludes one's environmental surround. The father's investment in scientific tools—and his obliviousness to his daughters' sexual experimentation—encapsulates the paradox of selective focus and inattentional blindness this chapter explores. Unrestrained concentration on detail underscores the risk of distraction that both lies within, and can be catalyzed by, focus. Scientific inquiry obscures the daily:

> So mighty wise that he could spy
> The Motes in *Luna*'s radiant Eye,
> And yet so dull, he could not find
> Which way his Daughters were inclin'd. (42)

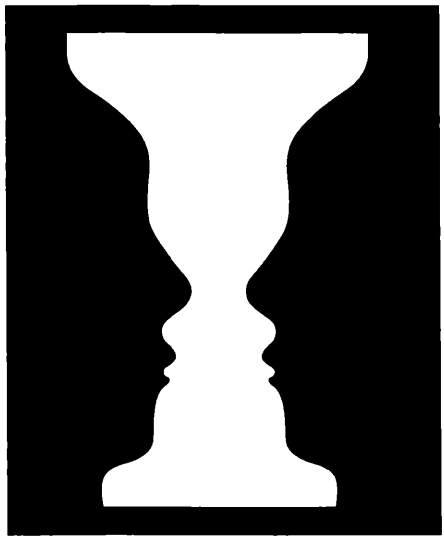
Comically, Pack's rendering of attention as distraction relies on a detail that only a semiobsessive follower of eighteenth-century microscopy would note. The father's attention falls not on any insect, but on the recently discovered luna moth; his (and the microscope's) focus narrows to isolate the eyespots on its wings—minutiae whose sole purpose is diversion. The "Motes in *Luna*'s radiant Eye" symbolize distraction; eye-shaped spots provide the insect with its central defensive mechanism, an optical illusion adapted to distract and intimidate predators.[2] The magnification of the microscopic lens that allows the paternal figure to focus on distraction also reveals the blind spots inherent in narrow attention. The technology instrumental to his masturbatory obsession not only blinds him to the sexual transgression of the microscope's regendered use but literally enables it. Habitually narrowed attention renders the mind "so dull" one cannot espy the surrounding world.

In 1794, William Godwin would translate these epistemological problems of selective focus into a central component of his Gothic fiction. Blindness to danger, in *Caleb Williams*, no longer requires an instrument; at the novel's turning point, the hero becomes so focused (here, on a box of secret papers) that the



Illustrations of the male (A) and female (B) *Phalaena luna* by Pieter Cramer and Caspar Stoll (1779). Cramer and Stoll, Plate XXXI, "De uitlandsche kapellen," Biodiversity Heritage Library, www.biodiversitylibrary.org.

house could—literally—burn down around him: "The idea [of opening it] was too powerful to be resisted. I forgot the business upon which I came, the employment of the servants and the urgency of general danger [and] should have done the same, if the flames . . . had reached this very apartment. . . . My act was in some sort an act of insanity. . . . It was an instantaneous impulse, a short lived and passing alienation of mind."[3] Utterly fixated amid a devastating fire, Caleb loses track of all else: servants, danger, flames. Few unexpected connections in eighteenth-century literature—pornography and the Gothic, a luna moth and



The Rubin vase, an optical illusion that exploits our tendency to foreground either white or black space.

a box of papers—reveal more about Enlightenment attention theory and its impact on neuroscientific practice. The yoking of myopia and focus that links Pack's incestuous and Godwin's incendiary leitmotivs exemplifies what I call the *paradox of selective attention*, moments when intense focus double as attention blindness, a "basic feature of the human brain that, when we concentrate intensely on one task, causes us to miss just about everything else."[4] The term *attention blindness*, made famous in cognitive science by Simons and Chabris's playful "Invisible Gorilla" experiment relies on this fulcrum between intense concentration and diversion. While watching a video of students (in black and white T-shirts) passing basketballs, subjects are asked to count how many times the ball is tossed between the team in white. After a short pause, the experiment's real question emerges: did anyone notice the gorilla? Approximately 73 percent of subjects did not see the person in a gorilla suit who threaded among the players, though this person paused for a King Kong–style chest thump.[5] Intense focus on a task—be it counting ball passes or dissecting spots in a luna moth's eye—yields focal blindness, individuals distracted from the gorilla (or, for Pack, the metaphorical elephant) in the room.

The Rubin vase provides an apt visual metaphor for this paradox of selective focus. If the viewer at first tends to see in either/ors—two faces (black) or an ornate vase (white) but rarely both—we soon learn to oscillate between the two. This cognitive behavior can be described as rapt focus or as distracted blindness. Like Rubin's bi-stable image, "The Microscope" deploys the contrast

between attention and distraction—between positive and negative space, the moth's wings and the daughters' sexual play—to reveal their simultaneity. The duality of selective focus illuminates the danger of selective blindness. Both a metaphor for the static mind and a device with a dangerous portability—lab to home, table to bedroom—the microscope is barred from associations with flexible cognition or healthy sexual mobility; moving only in familiar (indeed familial) circles, the tool limits its users' range of focus to domestic spaces and magnifies optical and sexual transgression.

Microscope and Mind

Incorporating scientific technologies and metaphors into eighteenth-century conversations about attention spurred debates over empirical practices that left the vaunted power of focus vulnerable. What makes Pack's poem so interesting is not so much its use of the microscope as a trope for selective focus as its ability to reveal the cultural discourses surrounding it. In his 1751 *Encyclopédie* entry, Johann-Heinrich-Samuel Formey contends:

> ATTENTION, s.f. (*Logiq.*) . . . L'*attention* est, pour ainsi dire, une espece de microscope qui grossit les objets, & qui nous y fait appercevoir mille propriétés qui échappent à une vûe distraite. Pour augmenter l'*attention*, il faut avant tout écarter ce qui pourroit la troubler.
>
> [Attention is, so to speak, a species of microscope which enlarges objects, & which makes us there perceive a thousand properties which would escape an inattentive view. To increase the attention, it is necessary for all to draw aside what can disturb it.][6]

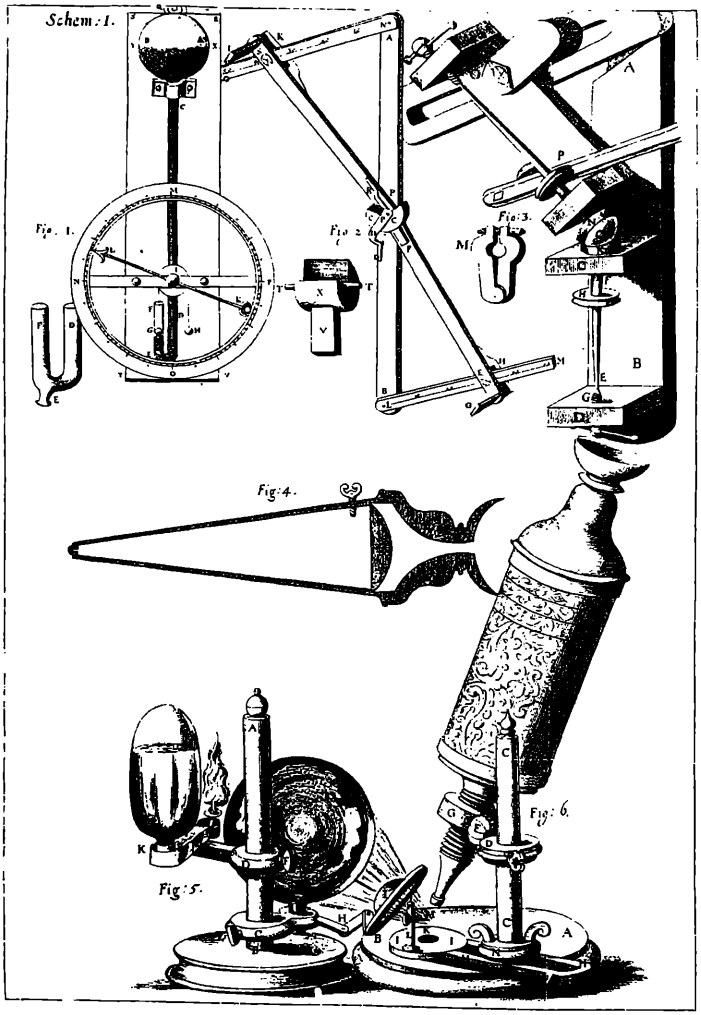
An act of selection, attention is defined as a positive narrowing of cognition from the many to the one; only by excluding distractions does one perceive details that would "escape an inattentive view." Unifocal concentration emblematizes the technological magnification of intellectual and scientific progress.[7] This teleological view stands in stark contrast to Diderot's article on "distraction" from the same work. Like Pack's poem, his entry denigrates attention as cognitive stupor; dulled by recursive focus, the mind "rests on . . . the same idea."[8] Fixated attention invites cognitive paralysis.

Invoking the microscope allowed Formey to reclaim attention's religious value in an increasingly secular age. Eighteenth-century religious manuals counseled that techniques that could keep "the Attention . . . fixed upon, and stayed in true Watchfulness toward the Lord" made the "Mind more fitly prepared to receive . . . his divine Light and Power."[9] Praises of selective attention's fixity extended into scientific discourses, particularly descriptions of proper empirical thought. Jean Senebier puts it straightforwardly in *L'art d'observer* (1775): "at-

tention alone renders the observer master of the subjects he studies, in uniting all the forces of his soul, in making him carefully discard all that could distract him, and in regarding the object as the only one that exists for it [i.e., attention]."[10] Selectivity was interwoven with a culture of objectivity. "For Enlightenment naturalists," Lorraine Daston and Peter Galison note, "observ[ation] was first and foremost an exercise of attention." Its "economy . . . was pointillist, magnifying, and therefore deliberately repetitive. . . . Only the narrowness of focus could sufficiently concentrate attention to the level of intensity required for exact [scientific] observations."[11] A technology of focus, the microscope's structure sought to compensate for the limits (as well as the duality) of binocular human vision, allowing one to narrow, fix, and magnify sight by pressing one's face to its ocular frame.[12]

Yet if the Enlightenment, as Adorno and Horkheimer contend, had a dark side, so did its symbol of scientific progress; as the technology's power increased, cultural criticisms multiplied.[13] The spatial organization of the microscope and the relationship between instrument and viewer became the model for technology's powers of focus; for observers attending to a range of stimuli, the microscope symbolized a magnified, instrument-mediated sight crucial to empirical progress.[14] Images of the microscope, however, often erased the viewer; to see the eye pressed to its lens was also to visualize (and conceptually realize) the negative space gone unnoticed—a space often crowded by optical paraphernalia. Pope's attack on microscopy in *An Essay on Man* (1732) reverses magnification (and animal-human hierarchies) to make its point about the dangers of adjusting human focus: "Why has not Man a microscopic eye? / For this plain reason, Man is not a Fly."[15] His point: to choose to see things beyond one's ken was also to occlude things that fell within it.

Gothic fiction, renowned for its monomaniacal (often villainous) characters and its ability to suspend readers' attention over the course of a novel raised another problem: duration. How long could attention remain fixed before becoming fixation? According to *The Principles of Aesthetics*, the power of art lies in its ability to fix the dynamism of experience into a "stable object": "[E]xperience . . . is always in flux, coming and going, shifting and unaware. But through expression it is arrested by being attached to a permanent form, and there can be retained and surveyed. Experience . . . receives through expression the fixed, clear outlines of a thing, and can be contemplated like a thing."[16] Yet Garrett Stewart was far from teasing when he diagnosed the Gothic with "attention surfeit disorder"—a surfeit, one could say, of single-mindedness.[17] As writers from Swift to Godwin reveal, it was a short step from fixity to fixation, and from fixation to madness. The question was how to craft a literary structure of suspense around monomania that could suspend an engaged reader yet invite a cognitive mobility in audiences its characters often lack. To concentrate on one



Robert Hooke's microscope with condenser for concentrating light (1665). HIP / Art Resource, New York.

thing in fiction—especially in the Gothic—is not simply to lose personal control over attention; it is to risk losing the flexibility that allows the mind to adjust to the dynamics of a changing environment, blocking the webs of shared emotion and social affect linked to healthy sensibility, feeling, and sympathetic exchange.

This double view of selective attention continues to shape conversations in cognitive science. Echoing those who praised microscope and mind for their singular focus, one body of neuroscientific work defines attention as inherently selective. In this model, known as the "spotlight" theory of attention, focus is

comparable to a beam of light, "highlighting selected information and leaving information outside the focus in the dark"; by narrowing consciousness to a few objects, the mind, like "a zoom lens," increases precision.[18] A second body of neuroscientific research, interested in the downsides of selectivity, considers the cost of shutting out distractions; like Simons and Chabris, these scientists investigate inattentional blindness. As this research emphasizes, "selecting some objects or regions of space [has] a 'dark side' in that nonselected objects . . . may be actively inhibited."[19] Focus on a smaller bandwidth increases the power of attention, yet this narrowing also excludes more of our environment from cognitive processing. The Gothic took this to its logical extreme: fixation. Emphasizing the "dark side" of concentration, Gothic writers fashioned a portrayal of monofocus as madness that reinforced the need for cognitive mobility and focal multiplicity in the name of mental health. Before tracing how the incestuous thematics in Pack's sexual satire become cognitive pathology in the Gothic, however, we must turn to the scientific discourses that enabled it: the incorporation of terms from mathematics, chemistry, and optics—focus, absorption, concentration—into attention's semiotic field. Only in their wake can rapt attention become a Gothic figure of selective blindness, *l'idée fixe*, and a mind driven to distraction.

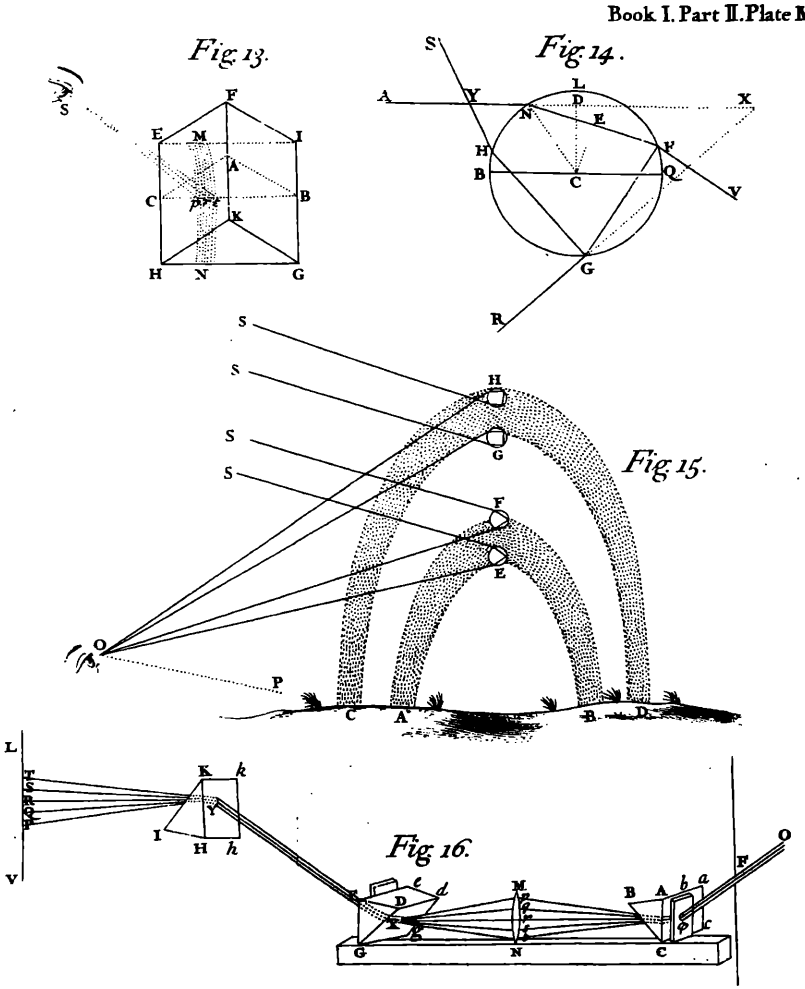
Scientific Metaphors and the Madness of Attention

The concept of monomania, Marina Van Zuylen notes, took fullest form in the nineteenth century: first explicitly "disseminated by the *médecin-aliénist* Esquirol and by the psychiatrist Etienne-Jean Georget in the first two decades of the nineteenth century," a "watered-down version of their definition spread like wildfire in French society."[20] In this state, as Esquirol put it, "one's rational mind . . . was abnormally fixated on certain worries and concerns, to the exclusion of other[s]."[21] Yet Locke had summed up the idea that selective attention could become a form of madness as early as 1688. His *Essay* lays out how focus on one thing could become distraction: "The mind employs itself about [its ideas] with several degrees of Attention. Sometimes the mind fixes it self with so much earnestness on the Contemplation of some Objects, that it turns their *Ideas* on all sides . . . and views every part so nicely, and with such intention, that it shuts out all other Thoughts, and takes no notice of the ordinary Impressions made then on the Senses."[22] While this focus has a relatively innocuous effect, "fixing" the mind on one thing risked obfuscating ordinary thoughts (i.e., the dynamism of the social banal). Focus left too long in contemplation could become pathological rigidity: "To be engrossed so by one object, as not to be prevailed on to leave it for another . . . is to make it of no use to us. . . . Did this state of mind remain always so, every one would, without scruple, give it the name of perfect madness."[23]

This depiction of focus as madness draws out three elements in the pathologization of selective attention qua fixation in the last half of the eighteenth century. First, selective focus could become excessively *narrow*; second, it could become *static* over time; finally, it could become *habitual*, producing a rigid mind. Too preoccupied to admit stimuli, it remained locked in a cycle of recursive concentration. In a 180-degree turn, monofocus, the traditional mark of reason and mental discipline, became an emblem of cognitive inflexibility. The fixated seemed to have lost control of their attention: an idea or object ruled the mind, not vice versa. In this paradigm, which aligned selective focus with fixation, the positive and negative valences of this moral and cognitive system inverted: distraction became a mode of creativity, attention a form of madness.

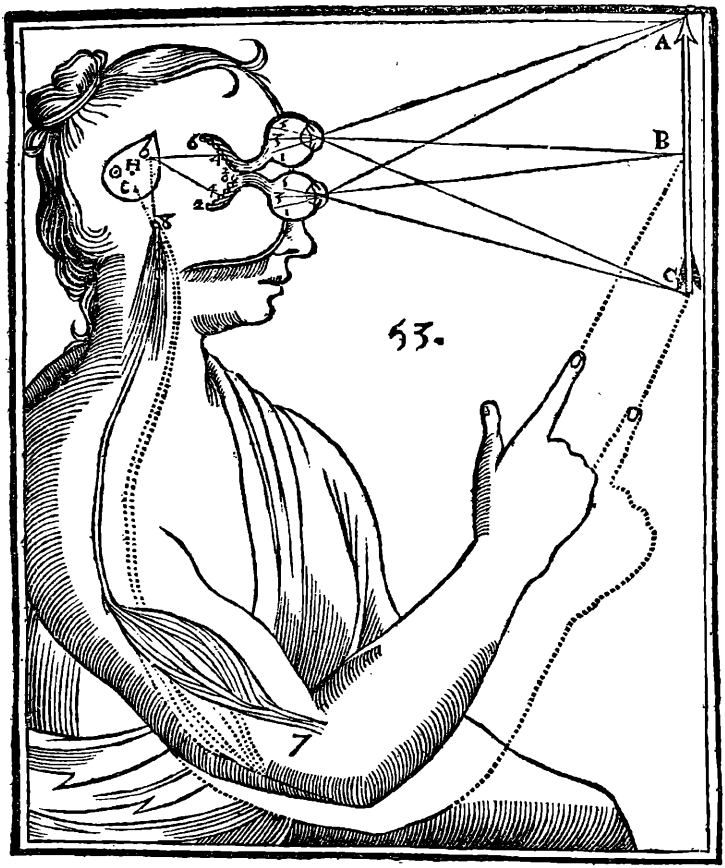
Pack's verse was already linked to Swiftian satire; Kristin Girten has noted their parallel indictments of microscopy via a false alignment of sight and touch.[24] Few, however, have recognized that the connection between Pack's "The Microscope" and *Gulliver's Travels* extends—from Charlotte Lennox's *Female Quixote* to Godwin's *Caleb Williams*—in a literary-philosophical tradition that used contemporary scientific discourses surrounding attention to cast focus as fixation. Swift's caricature of the Royal Society and George I on the Isle of Laputa, a parable of selective attention gone mad, translates the idioms and practices surrounding "focus" into a farce on the dangers of empiricism: narrowed attention, cognitive rigidity, and the prioritization of singular focus to the point of "perfect madness."[25] Meeting the Laputan king, an emblem of focused mind-blindness, Gulliver finds him so absorbed in a proof that "His Majesty took not the least notice of us, although our Entrance was not without sufficient Noise, by the Concourse of all Persons belonging to the Court. But, he was then deep in a Problem, and we attended at least an Hour, before he could solve it."[26] John Clarke's *An Essay Upon Study* (1731) summarizes the eighteenth-century commonplace Swift mocks. Arguing that there is "nothing of more Use to the Mind . . . than to be able to fix its *Attention* steddily upon any Object," he declared math the ideal tool to train focus; solving proofs required "the utmost stretch of attention" and taught students to "pursu[e] a long Train of Reasoning without Distraction."[27] The inverted tableau in *Gulliver's Travels* explodes this valuation; the king's mind locks on math, leaving him blind to the entrance of his courtiers and unaware of the passing time—or anything else.

As technological language from mathematics and microscopy entered cognitive discourses for describing attention, they facilitated new critiques of single-minded focus. For much of the eighteenth century, cultural associations with focus centered not on mental acts but on mathematical graphs, levers, and optical lenses. One original meaning of *focus* revolved around a point where lines could *meet*, or "converge," to yield increased mathematical or optical strength. Popularizing the term in *Astronomiae Pars Optica* from 1604, Johannes Kepler used focus to



Optical phenomena observed and described by Sir Isaac Newton. From *Opticks* (London, 1704). HIP / Art Resource, New York.

refer to the "central point" of an orbit.[28] (Appropriately, it appears in a section seeking to use optical structures in the human eye to provide more rigorous measurements of heavenly bodies, connecting geometrical "focus" with the focal points of mirrors.) In Enlightenment mathematics, "focus" applied to a point on parabolas and graphs; in plane geometry, it denoted a central point of reference, or cross-point, that could spatially map all other points. Optical and mathematical connotations coexisted. To theorize light and color, Sir Isaac Newton relied on both: focus is "the Point from which Rays diverge or . . . converge" *and* a tool for refracting light to produce the colors we see.[29] For



A diagram by René Descartes depicting vision and the effect of parallax. From *Treatise on the Formation of the Foetus* (Paris: C. Angot, 1664). Wellcome Library, London.

Kepler, Descartes, and Newton, the line joining the foci—be it a rule governing our perception of physics, an inverted parallax, or the meeting point of light rays—represented the power of this mathematical center point. Symbolized by the "burning point," the place where light rays concentrate in a lens, this convergence marked a gathering of energy; focused through a magnifying glass, light could produce enough heat to burn an ant.

First applied to descriptions of attention in the eighteenth century, the magnified power of focus was translated into satire. A 1760 work by Oliver Goldsmith offers the first cognitive use of focus; its scientific meanings undergird an ironic depiction of a theatergoing couple who "would sit in none but a genteel box . . . where they might see and be seen, one, as they expressed it, *in the very focus* of public view."[30] Theatergoers' lines of sight join at their box, multiplying its social and cultural capital; the languages of cross-points and optics converge

in a metaphor of attention-hungry aspiration. The couple's longing to be the center of attention by finding the architectural focal point, in Goldsmith, also puts them under increased literary scrutiny, a satiric magnification with the ability to burn.

Far earlier, Swift drew on these scientific discourses to mock the distortions of selective attention, sculpting its linear power into a parodic structure without explicitly using the term. In this literary rendering, the socio-cognitive consequence of excessive focus, to borrow Locke's phrase, was "a perfect madness." The math-absorbed king of the Laputans symbolizes the skewing of a science-obsessed culture, whose objects (and structure) of foci deform body and mind until none can successfully navigate his or her social world:

> [T]he Minds of these People are so taken up with intense Speculations, that they neither can speak, nor attend to the Discourses of others. . . . [T]hose Persons who are able to afford it always keep a *Flapper* . . . [who is] employed diligently to attend his Master in his Walks, and upon occasion to give him a soft Flap on his Eyes, because he is always so wrapped up in Cogitation, that he is in manifest danger of falling down every Precipice, bouncing his Head against every Post, . . . or being jostled himself into the Kennel."[31]

Rewriting positive metaphors of linear focus that connect eye and object, Swift imagines Laputan habits of concentration grotesquely twist their heads: "Their Heads were all reclined either to the Right, or the Left; one of their Eyes turned inward, and the other directly up to the Zenith."[32] If Descartes's diagram of lines of sight can illustrate the parallax (i.e., how visual fields overlap and invert to produce depth perception), Swift's depiction reverses the problem, suggesting that scientific modes of sight distort and reposition vision. Laputans' incessant focus on esoteric scholarship turns one eye permanently upward, dragging the head atilt with it. A second ocular deformity symbolizes their constant introspection; the other eye has flipped inward to direct itself on their own thoughts.[33] More than merely distorting binocular vision, myopic focus kills curiosity and cognitive motion. Encountering an unfamiliar species—a Gulliver—the Laputan courtiers are disinterested. Intensively focused, they are immobilized by absentmindedness: "unmoved by the sight of [his] foreign Habit and Countenance," they "forget several times what they were about" in bringing him to the king, only roused to motion when hit by their Flappers.[34] Gulliver's backhanded compliment about the specialization of Laputan knowledge illuminates this lacunae of interest: "Although I cannot say that I was ill treated," he writes, "I must confess I thought my self too much neglected. . . . [N]either Prince nor People appeared to be curious in any part of Knowledge except Mathematicks and Musick, wherein I was far their inferior, and upon that account very little regarded."[35]

This Swiftian view of scientific monofocus models its own selective blindness. As John Bender and Michael Marrinan remind us in *The Culture of Diagram*, Enlightenment technologies of sight were far from inflexible:

> viewing the world with instruments enlists several bandwidths of attention . . . [and] presenting data to human perception always involves compression, translation, or refiguration of the world generating the presentation. Some branches of natural science—such as astronomy and microbiology—depend heavily upon viewing instruments. Others, notably Buffon's natural history, embrace a narrowed bandwidth of description in the interest of fine-grained discriminations and hierarchical clarity. . . . [E]xpansion of scientific inquiry produced sectors of variable attention within the human perceptual field according to specialized domains, disciplines, and technologies.[36]

Yet in parodying focus, Swift's goal was not merely to mock overfocus; it was to provide a structure capable of battling mental stagnation by forcing readers to see focus as attention and distraction simultaneously. *Gulliver's Travels* becomes a literary version of Rubin's bimodal image. With Laputan attention focalized through the oft-ignored hero, Swift's satire hinges on perspectival flexibility; to understand the parody, readers must shift between the Laputans' view of their own focus and Gulliver's "foreign" perspective as the ignored. *Gulliver's Travels*' depiction of single-mindedness serves as a counterpoint to mathematics, training not singular focus but a multifocal style of thought mobile and capacious enough to process literary and environmental complexity by holding in mind positive and negative attentional space.

If the parodic potential of scientific focus led to the comic slapstick of Laputans hitting their heads on posts, Charlotte Lennox's *The Female Quixote* (1752), whose heroine almost dies of pneumonia when romantic obsession prompts her to leap into a river, encapsulates the darker possibilities opened by the interplay between cognitive and scientific discourses of absorption. In the years between *Gulliver's Travels* and *The Female Quixote*, Allan Ingram explains, "the eighteenth century saw a substantial professionalization of insanity," with increased codification of "the mechanisms for treating it."[37] In this gendered rewriting of Cervantes's *Don Quixote*, Arabella is so immersed in reading her library of romances that "her Ideas . . . tak[e] a romantic Turn," leaving her "Mind . . . wholly filled" with fantastic "Notions and Expectation."[38] Where the Laputans are implicitly mad, Arabella is diagnosable. Selective attention fills Arabella's cognition, creating a fever (and madness) in need of a doctor; the man who cures this fevered state also appears to cure her romance-absorbed ailments. The physical and cognitive maladies were linked in more ways than one. According to *The polite lady: or a course of female education*, absorption is "a violent disease

Jean-Honoré Fragonard, *Young Girl Reading* (1770). Album / Art Resource, New York.

of the mind" comparable to a "raging fever" that "swallows up . . . all the faculties of the soul, and renders it insensible to every other impression."[39]

Novelistic immersion was thought to pose particular danger to women. Jean-Honoré Fragonard's *La Liseuse* offers us a classic depiction of a young woman lost in a book. This visual rendering of immersion draws on another set of scientific motifs shaping eighteenth-century discussions of selective attention: notions of absorption from geology, medicine, and chemistry. *Absorption*, from the Old French *assorber*, "to swallow, devour, to take in, assimilate, or soak up," was used in the eighteenth century to describe "the action or process of swallowing up or engulfing a material thing"; the "state of being engrossed in something"; and "the chemical or physical process of absorbing substances, energy, light, etc."[40] All imply fluidity as well as complete saturation; one substance

or idea "swallows" up or permeates another. (Absorption could describe an earthquake—"absorptions" in which whole "cities" are "swallowed"—or the properties of blood; it could coagulate, permeate, or fill other bodies.)[41] This combination of ideas around absorption—of catastrophic engulfing, saturation, and substances both fluid and unified—allowed selective attention to be recast as a single idea that permeated and engrossed the mind, coloring (and distorting) perception.[42]

Though Fragonard uses the traditional line of attention to signify the young woman's focus, the painting's patterning of color signals a psychic absorption that also permeates her body and environment. The red and gold of the book's pages spread across the painting; the color, traced from the book through her hand, flows into the curve of red at her ear, her blushing cheek, even the mahogany shadows of lace, symbolizing the fluidity of mind, body, and text in immersive reading. The world of *La Liseuse* is saturated with the book's colors (red, yellow, and white), which, extending into her chair and the room's shadows, evoke the text's tinting of her cognitive world. The book, quite literally, absorbs her, coloring her external reality.

The absorbed novel reader, the central conceit of *The Female Quixote*, casts the mind as something deeply permeable. As a metaphor for cognition, absorption is imagined as something, almost liquid, that can be taken into the body and permeate the mind. Selective attention, in this idiom, describes a process in which a single idea enters the brain and expands; the mind, spongelike, draws it in via a kind of osmotic pressure and reaches saturation. Lennox conveys this idea of a preoccupied mind, filled to the brim with romances, through an all-or-nothing language that, like Swift, portrays singular focus as social isolation. In her focus on fiction, Arabella pursues a style of reading that not only takes up "her whole Time" but also leaves her "wholly taken up."[43] With only one idea, or framework, filtering her external world, the romance-obsessed Arabella is blind to anything—and anyone—outside its generic lens.

If in Haywood multiple ideas crowd cognition to block situational awareness, Lennox's novel imagines a single idea (here, a genre) expanding to occupy a heroine's mind, leading her to expect a sexual ambush from every man she meets. The heroine repeatedly mistakes the motives of those around her, taking all men, particularly banal everyday suitors, for kidnappers "threaten[ing] her with executing some terrible Enterprize." (Early on, a man approaching on horseback—one Mr. Hervey whom she knows and likes—is thus taken for "a Ravisher.")[44] Perhaps the most comic example of Arabella's romantic misreadings appears when she assumes that a carp-stealing servant is a nobleman in disguise. When the head gardener catches him fish-in-hand, his perfidy is rationalized according to romantic story line; Arabella rewrites his theft as heartsick despair. No fish thief, the royal youth (mourning her rebuffs) must have approached the lake with suicidal intent, grabbing the carp at the last minute to hide his "fatal

Design." These distortions, we know, culminate in a similar act: she herself jumps into a river. Asked by the doctor to explain her behavior, she expounds: "And why . . . should I not dread the Misfortunes which happen'd to the divine *Clelia*, who was carry'd to one of the Isles of the *Thrasymenian Lake*? Or those which befel the beautiful *Candace*, Queen of *Ethiopia*, whom the Pyrate *Zenodorus* wander'd with on the Seas? . . . Or, in fine, the various Distresses of many other fair and virtuous Princesses: Such as those which happen'd to *Olympia, Bellamira, Parisatis, Berenice, Amalazantha, Agione, Albysinda, Placidia, Arsinoe, Deidamia*, and a thousand others I could mention."[45] In this vision of absorption, the fixated no longer focuses on a static object; though she is a bookworm, Arabella's romance-reading obsession seizes on the genre as a whole, which tints her cognitive frame. Arabella, in fact, views things around her quite clearly; her romantic bent—almost fever—traps her in a maze of fiction-saturated plotlines and cognitive schemas. Incapable of interpreting anything in her world that appears otherwise, the heroine is absorbed to the point of being blind to the spectrum of cultural meaning that falls outside of romance.

With this, we can return to *Caleb Williams*, with its hero so focused he is immune to flame. By the 1790s, one can see Godwin working with a different network of possibilities for portraying single-minded madness. Caleb, a man characterized by one "ruling passion" (118) that governed "the whole train of [his] life" (4), becomes fixated on his master's role in a long-ago murder. (The hero's mind locks on the mystery, "the story . . . for ever in [his] thoughts" [107].) To the familiar metaphors of focus and absorption, Godwin adds the condensed power and circularity of a scientific idiom derived from math, physics, and chemistry: *concentration*. Single-mindedness still connotes focusing with dangerous durability on one point; simultaneously, it saturates, or absorbs, ideation. Yet Caleb's brooding also returns recursively—or circles around—an obsession, gaining power as it moves toward center: "In fine, the idea having once occurred to my mind, it was fixed there for ever. My thoughts fluctuated from conjecture to conjecture, but this was *the centre* about which they revolved" (107; my emphasis).

Concentration combines the magnified power surrounding "focus" and notions of being all-consumed, or "absorbed," adding the suggestion of an energy and motion that inheres in the atoms themselves.[46] In Ephraim Chambers's *Cyclopaedia* concentration is "the . . . withdrawing of a thing inwards; or driving toward the *Centre*" and a chemical purification: "the highest degree of Mixtion . . . wherein two or more Atoms or Particles touch."[47] A quarter century later, Johnson's *Dictionary* gives:

> To CONCENTRATE. *v.a.* [conentrer, Fr. From con and *centrum*, Lat.] To drive into a narrow compass; to drive towards the center.

> CONCENTRATION. *n.s.* [from *concentrate.*] Collection into a narrow space round the center; compression into a narrow compass.[48]

In both cases, concentration is an *action*; "to drive" something into a narrow compass, producing a compression (of atoms, of a substance, or of thought) that evokes rising potency. Johnson offers this quote from *Arbuthnot on Ailments*: "Spirit of vinegar, *concentrated* and reduced to its greatest strength will coagulate."[49] Concentration distills; it takes a diluted mixture and magnifies its strength by purifying it of other substances (such as by evaporation). For Chambers and Johnson, the result is the same: a gathering of energy. The *Cyclopaedia* offers the example of digestion: "external Cold . . . *concentrate*[s] the Heat within Bodies. After Meals, the natural Warmth retires, and as it were *concentrates*, to promote the Digestion."[50] By drawing blood toward a natural center, the body produces heat, facilitating the processes necessary to absorb a meal and generate energy.

In each case, concentration compresses scope—and increases energy—by bringing normally dispersed substances together toward a common center, multiplying their net force. Caleb's description of his *idée fixe* as the "centre about which they revolved" draws out the magnetic power (and the circularity) of this scientific idiom. Though his thoughts "fluctuat[e] from conjecture to conjecture," the hero's obsession creates a centripetal force that draws them toward a single point: Falkland. This inward spiral is symptomatic of Gothic monomania. Each character possesses a single-minded drive; however, their concentration also produces an independent energy that impels their minds and actions forward, a pursuit both assiduous and incessant: "unalterable resolution" (79), "unrelenting" (314), "an effort to which I could see no end" (254), etc. As attention becomes fixation, in the Gothic, focus leads not to forward motion but a cognitive spinning. Cycles of endless drive disguise stasis; indeed, it is the *illusion* of motion and advance (always broken) that drives these characters into madness.

The Politics and Poetics of Fixation

James Boswell may have described his multifocal style of thought, "distracted with a thousand ideas," as a sign of melancholy in his letters; yet the way had been paved for a competing world in which the unifocal could epitomize what Locke called "perfect madness."[51] This connection between insanity and focus reaches a new cultural extreme in Gothic fiction of the 1780s and 1790s, a moment remarkable for the overlapping of literary, medical, and philosophical discourses in the pathologization of selective attention. The disengagement of focus from a scientific model of rationality and empirical sight proves essential to the literary-philosophical work of William Godwin; it is a driving force of

plot and character in *Caleb Williams*. Drawing on the commonplace linking the Gothic to single-minded attention, a suspense that absorbed and immersed terror-addicted readers, Godwin's fiction reveals some of the century's most important reconfigurations of unifocal concentration: the sociopolitical association of obsessive focus with fixed class hierarchies, the portrayal of single-mindedness as a block to sympathy, and the loss of agency in fixation. Godwin's alliance of politics and attention theory proved radical on both fronts. "Where politics appears in English novels," Marilyn Butler notes, "it is commonly at the margins; in *Caleb Williams* it is central."[52] Aligning rigid focus with the political rigidity of aristocratic privilege and the benefits of sympathetic engagement with multifocal cognition, obsessive attention emerges in *Caleb Williams* as social madness.

One of the goals of Godwin's novel is to lay bare the inequalities of attention in the legal and political system; the psychological is always already political. The political, moreover, inflects (and often restricts) deep structures of individual and social cognition.[53] The story of a young man indentured to—and consumed by the secrets of—one Mr. Falkland, *Caleb Williams* tells a tale of reciprocal fixation embedded within a system of political inequality. The hero's discovery of Falkland's secret locks servant and master in a cycle of co-obsession whose circularity and rigidity—even paralysis of mind—undercut focus's traditional associations with volition, agency, and progress; unable to break, or shift, concentration, characters' singular concentration renders their minds rigid, unable to adapt to their environment. Cast as a form of distraction (i.e., attentional capture), selective focus leaves an individual imprisoned, a symbol for social hierarchies' restrictive power over attention. Caleb, first fixated on Falkland and, later, the object of his master's obsession, is left frozen, deprived of will and power of motion:

> I . . . would willingly have withdrawn myself. But it was impossible; my passions were too deeply engaged; I was rooted to the spot; though my own life, that of my master, or almost of a whole nation had been at stake, I had no power to change my position. (126)

> In the state in which I found myself . . . , I was incapable of any resolution. All was chaos and uncertainty within me. My thoughts were too full of horror to be susceptible of activity. I felt deserted of my intellectual powers, palsied in mind, and compelled to sit in speechless expectation of the misery to which I was destined. To my own conception I was like a man, who, though blasted with lightning and deprived for ever of the power of motion, should yet retain the consciousness of his situation. (134)

> I was but ill prepared for the servile submission Mr. Falkland demanded. . . . I was his prisoner: and what a prisoner! All my actions observed; all my gestures

> marked. I could move neither to the right nor the left, but the eye of my keeper was upon me. He watched me. . . . For me there was no more of freedom. (143)

Physical and mental stasis converge to set fixation and freedom in opposition to each other. Rendered explicit in the Gothic, this combination of cognitive narrowness and inflexibility illuminates the final problem of the absorbed mind: the loss of cognitive control and, by extension, in Godwin, the loss of political agency.

If the phrase "to fix the attention" implied will, volition, and cognitive stability, "fixation" robs the subject of action. *Caleb Williams* turns this subtlety into a narrative argument; fixated characters stand in for a cognitive stasis that reflects the vulnerability of the less powerful in—and *to*—the rigidity of a politicized attentional system.[54] Fixity of body, an imprisonment that relies on the stunned nature of the paranoid or lightning-struck mind, not only reflects cognitive fixity; it also symbolizes the entrenched hierarchy wherein Caleb is subject to the attention of his master and deprived of social mobility. Falkland's fixation immobilizes body and mind; yet his obsession with pursuing his servant leaves him far less restricted, able to extend his virtual reach across Britain. Ironically, the financial metaphor "to pay attention" (which imagined the cognitive function as something distributed to many things), when applied to singular fixation, illuminates the dynamics of rank and status that allowed attention to be bought and sold. Status gave advantage to the observer higher in the social order, while the man lower in the hierarchy ended up focused on and frozen, imprisoned by the observer's gaze.

In Godwin's critique, the political structures that govern attention reveal the power of the class system—and its social codes—to skew the natural equality of focus granted every man:

> In a loose and general view I and my neighbour are both of us men; and of consequence entitled to equal attention. But in reality it is probable that one of us is a being of more worth and importance than the other. . . . In the same manner the illustrious archbishop of Cambray was of more worth than his valet, and there are few of us that would hesitate to pronounce, if his palace were in flames, and the life of only one of them could be preserved, which of the two ought to be preferred.
>
> Every change of sentiment, from moral delusion to truth, every addition we make to the clearness of our apprehension on this subject and the recollectedness and independence of our mind, is itself, abstracted from the absolute change of our institutions, an unquestionable acquisition. Freedom of institution is desirable, chiefly because it is connected with independence of mind.[55]

Relying on the weight granted to rank and wealth, the upper echelon uses attention's power to control those beneath. In his inexorable pursuit of Caleb, for

instance, the squire Falkland claims dominion over his indentured servant. In Godwin's world, a man speaking with sincerity, emotional integrity, and confidence should be able to capture audiences' focus, yet *Caleb Williams* reveals this ideal to be far from reality. Telling a story from a position without money or power yields few listeners in the novel. Focal equality is distorted by a corrupt sociopolitical system; ingrained biases toward aristocratic privilege distort humanity's predisposition to hear—and notice—truth. As the supposed veracity of the hero's tale is repeatedly ignored or degraded by a cadre of magistrates, prison keepers, servants, and laypersons, the novel reminds us: selective attention can not only be paid; it can also be bought.

Even after Caleb flees (and Falkland's object of focus is out of reach), the squire's surveillance continues to grow in scope and power through social influence. Circulating a story about Williams's villainy and promising a bounty, Falkland uses his money and reputation to expand his circle of watchers into the public sphere. The fixation of both the watcher and the watched moves from unifocal to multifocal, a combination of "neighborhood watch" and multisensory paranoia: "A numerous class of individuals, through every department, almost every house of the metropolis, would be induced to look with a suspicious eye upon every stranger, especially every solitary stranger, that fell under their observation. . . . It was no longer Bow-Street, it was a million of men, in arms against me" (270). Increasingly self-policing, Caleb must hide from the "suspicious eye" of an entire populace; the squire fashions a virtual panopticon around his servant. The ideal structure for imprisoning attention, the panopticon provides the illusion of surveillance without requiring a guard; according to Jeremy Bentham, it produced "a new mode of obtaining power, power of mind over mind, in a quantity hitherto without example."[56] Both the architecture and disciplinary methods for a prison system built around the illusion of ever-present attention draw on the conceptual idioms of concentration: "The Building circular—An Iron Cage, glazed—a Glass Lantern, about the size of Ranelagh—The Prisoners in their Cells, occupying the Circumference—The Officers . . . the Center. By Blinds and other Contrivances, the Inspectors concealed . . . from the Observation of the Prisoners: hence the Sentiment of a Sort of invisible Omnipresence."[57] If the panopticon relies on the internalization of its observational regime, the hero is its ultimate prisoner. Under the constant, albeit invisible, purview of Falkland or one of his proxies, Caleb becomes so engrossed by eluding surveillance that he circumscribes himself. Even disguised in a London refuge, the hero constrains his own movements, skulking past windows and refusing to exercise in daylight. Such self-policing is far from restricted to paranoia. The fixing power of Falkland's gaze—triangulated and socially dispersed to operate not only via social spies but also his minion, Gines—limits Caleb's range of motion to well-defined geographic boundaries. Just as the hero reaches

their edge, Gines sweeps in with the swiftness and power of a deus ex machina to render these confines explicit. "Beware the salt seas!" he declares:

> It is my business . . . to see that you do not break out of bounds. . . . You are a prisoner at present, and . . . the rules with which the softhearted squire indulges you are all England, Scotland and Wales. But you are not to go out of these climates. The squire is determined you shall never pass the reach of his disposal. . . . [I]f there had been any appearance of your setting your foot from land, we should have been with you in a trice, and laid you fast by the heels. (313)

The circle of fixation, extending outward from Caleb to include not only Falkland but Britain and its masses, inverts to become a politically motivated circumference that circumscribes his rights, drawing "lines of circumvallation round me that I may not escape" (315). Gines's comment to Caleb, which threatens him not only with imprisonment but capital punishment, provides Godwin with an apt symbol for the unjust influence of aristocracy in the legal system: the noose. Falkland's obsession encircles the hero like a "rope about [his] neck" (313).[58] Singular concentration moves beyond restricting one's mind and body; it intrudes upon the freedoms of other men, limiting their movements and minds.

Involuntary Attention: A Multifocal Selective Blindness

This impulse to critique political hierarchies allowed Gothic fiction, more than the century's medical manuals or philosophical treatises, to render the cognitive and social costs of unmoving attention transparent. In this decoupling of attention and will, concentration's circularity becomes the ultimate symbol of motion without progress, focus without direction, and attention recurrently impinged by unwanted thoughts. Rather than a mind that bends, or fixes, attention *on* an object, the object bends the individual's mind toward an idea. Across the Atlantic, Charles Brockden Brown's Gothic classic *Edgar Huntly: Or Memoirs of a Sleep-walker* offers a story of somnambulance (and a hero similarly fixated on boxes) in which obsessive focus drives characters even while asleep. In this landscape, voluntary and involuntary focus interpenetrate in a haze of semiconscious action. Edgar and Clithero both pursue an object that completely fills their attention: a buried box that contains a clue to one of the novel's (many) murders.

If in *Caleb Williams* obsessive fixation forms a recursive loop between master and servant, here involuntary cognition becomes contagious. Having seen Clithero sleep-digging and reburying the box and become obsessed with the man's tale of irresistible impulses, Edgar too starts to sleepwalk, mirroring a mind "defrauded . . . of the empire of [its] muscles."[59] "[I]rresistibly prompted," the hero finds himself compelled to return to the site; the scene of sleep-digging that follows reveals one of Brown and Godwin's shared interests, the paradoxical

coexistence of willed attention and volitionless motion: "The desire insensibly arose of opening and examining its contents. . . . I surveyed it with the utmost attention. All its parts appeared equally solid and smooth. . . . Some spring, therefore, secretly existed which might forever elude the senses, but on which the hand . . . might accidentally light. . . . The spot in which a certain degree of pressure was sufficient to produce this effect, was of all, the [least] likely to attract notice or awaken suspicion. I opened the trunk with eagerness."[60] A detailed survey of the trunk emerges despite Edgar's lack of consciousness; the episode blurs the line between waking and sleeping, attention and intention. As Edgar's focus on Clithero yields new nocturnal feats—everything from sleep-spelunking to rooftop climbs—the Gothic fiction of somnambulism pries apart the long-standing Enlightenment connection between attention, volition, and sanity. In sleep, Erasmus Darwin's *Zoonomia* argued, all motor activity was supposed to stop: "As all those trains and tribes of animal motion, which are subjected to volition [while awake are] entirely suspended during sleep; whilst the other classes of motion, which are more immediately necessary to life, as those caused by internal stimuli, for instance the pulsations of the heart and arteries, or those catenated with pleasurable sensation, as the powers of digestion, continue to strengthen their habits without interruption. . . . The truth of this assertion with respect to the large muscles of the body, which are concerned in locomotion, is evident."[61] Any deviation from this necessary pause—particularly coordinated activity of major muscle groups—is a symptom of psychic disorder: "no one in perfect sanity walks about in his sleep."[62]

With this, we can return to the intentionally ambiguous blend of obsessive focus, involuntary motion, and selective blindness surrounding the fire-thronged box scene in *Caleb Williams*. Imagining the hero drawn inexorably toward his master's library, the narrative slips into a passive framing of activity, a dreamlike state in which external circumstances govern locomotion: "my steps by some mysterious fatality were directed to the private apartment. . . . Here, as I looked round, my eye was suddenly caught by the trunk" (131). Drawing on the etymology of the word *obsession* in the notion of lost control (to be *besieged* by an idea), the novel theorizes fixation as a hindrance to agency even while one is awake.[63] (A "fatality" moves his feet, not his mind. Caleb does not direct his attention toward the box; his eye is "caught.") This duality of attention, between directed focus on an object and attentional capture by an object, is exploited to reinforce the power of the latter.[64] Seized by an "infatuation," Caleb declares "the idea [of opening the box] too powerful to be resisted." Fixation overcomes conscious will.

Attention, previously understood as a volitional "stretch" of mind, becomes a vehicle for articulating the cognitive uncanny—the haunting experience of somnambulance, automatism, and psychophysical stupor. Terry Castle diag-

noses these phenomena as products of a progressive Enlightenment discourse praising the advance of reason and truth. Alongside the elevation of will and rationality in this cultural-cognitive hierarchy, emerged a trough, or underbelly: "At bottom . . . was a new conception of the daemonic or irrational nature of thought. There was now a potential danger in the act of reflection—a danger in paying too much attention to mental images or in 'thinking too hard.'"[65] Yet Gothic attention was not merely the site of daemonic excess; it was both a place to think through the problem of consciousness and the "line" that joined the imagined, or phantasmagoric, to the real. The paradox of singular focus and selective blindness provided readers the space to question the alliance of singular attention with a clear and conscious direction of mind. Taking part in a bifurcation of traditional and modern attention theory that facilitated the cultural reversal of attention's positive valence, *Caleb Williams* depicts concentration as a vortex of repetitive thought that can spin a man and mind into insanity. Simultaneously, Godwin expands the definition of attention to include the unconscious and nonvolitional, retheorizing the beam of focus as an ongoing—almost automatic—integration and processing of stimuli that allowed the sane mind to move successfully through the world.

To delineate what fixated attention might look like when seen as pathology rather than as scientific and philosophical boon is the representational goal of much late eighteenth-century Gothic. Stories of monomania, for Van Zuylen, depict lives shaped by "a double project: to construct controllable spaces that protect these characters from the full range of life's shocks and disorders, and to find a set of indestructible norms that guarantee that somewhere still lies the promise of permanence. . . . Whether perceived as pathological, perverse, or poorly disguised maneuvers to counteract *horror vacui* and depression, these idiosyncratic obsessions are powerful weapons that enable individuals to resist the tyranny of the everyday."[66] If one danger of fixated attention is its ability to narrow a character's perspective, another lies in its permanence—its tendency to circumscribe one's cognitive range in perpetuity. Unable to break, or *shift*, concentration amid the pseudopleasures of fixity, monomaniacal characters focus so intensely on an object that change—spatial or temporal—beyond this fixation is obscured. Not only do they miss the metaphoric gorilla; their minds become inflexible, unable to adapt to other minds around them. Rendered habitual, monofocus becomes an isolation that spins toward madness.

Caleb Williams is a novel known for its double endings; in both versions, the hero is unable to break his focus away from Falkland. In the published edition, Caleb and his master's co-obsession wraps with the latter dead and the hero locked in a cycle of self-recriminating guilt: Falkland's "figure is ever in imagination before me. Waking or sleeping I still behold him" (325). In the unpublished version, the novel closes with the hero imprisoned and mad, debating "which

is the man, I or my chair?" (334). Even dethroned of reason, Caleb's mind remains in a state of displaced fixation. Describing the "wild and incoherent visions [that] perpetually succeeded each other, dragged my attention this way and that" (330), the hero incessantly returns to his center point: "I wonder who that Mr. Falkland was, for every body to think so much about him?—Do you know? If I could once be thoroughly myself, I should tell such tales!" (333–34).

In this dystopia of overfocus and insanity, involuntary concentration is not all bad. While selective focus certainly blinds the hero to changes in his environment, an unintentionally divided attention also allows Godwin to imagine a mind with room and flexibility to take in and process change. Often, preoccupation—with Falkland, or with escaping his surveillance—internally occupies the hero to the point that he loses track of his surroundings. Delivering a letter for Falkland, Caleb, lost in introspection, ends up on the wrong road entirely: "I began in fancy to take a survey of the various circumstances of my condition; and by degrees lost in the profoundness of my contemplation all attention to the surrounding objects. . . . Occupied with these meditations, I rode many miles before I perceived that I had totally deviated from the right path" (146). A survey of his social straits "in fancy" clouds his eyes to a much-needed physical survey of the road. Falkland's obsessive guilt frequently leaves him in a similarly oblivious state. Often caught "reclining motionless for hours together upon the edge of a precipice," he would "remain for whole nights together under the naked cope of heaven, inattentive to the consideration either of place or time, insensible to the variations of the weather" (124). Gothic novelists and Enlightenment philosophers had a shared interest in such moments of obliviousness. Stewart's *Elements of the Philosophy of the Human Mind* joined Locke in declaring that focus could block stimuli, or at least any memory of them: "when we are deeply engaged in conversation, or occupied with any speculation that is interesting to the mind, the surrounding objects either do not produce in us the perceptions they are fitted to excite; or these perceptions are instantly forgotten. A clock, for example, may strike in the same room with us, without our being able, next moment, to recollect whether we heard it or not."[67] Gothic characters' obsession leads them to ignore not only mild distractions, such as Stewart's clock, but also the equivalent of a hailstorm.

Godwin's choice to make characters' object of focus *mental* rather than physical allowed him to envision a multifocal selective blindness, one that could include external impressions alongside obsessive focus, if unconsciously. The conclusion of the murder trial, where Caleb, Hamlet-like, observes Falkland to confirm his master's guilt and then runs outside to air the one idea he now cannot get "out of [his] mind" ("Mr. Falkland is the murderer!"), offers us a clear fictionalization of unconscious multiplicity (130). Utterly preoccupied, the hero forgets all else, including the obvious dangers of declaiming one's master's

criminality, even in the woods. Yet in this scene of absorption and selective blindness, Godwin suggests the absorbed mind can take in more stimuli. An event, unnoticed at the time, occurs amid Caleb's frenzy. He will only remember it later: "My mind was full almost to bursting. . . . An incident occurred while I was in the garden, that seemed to make no impression upon me at the time, but which I recollected when my thoughts were got into somewhat of a slower motion. In the midst of one of my paroxysms of exclamation, and when I thought myself most alone, the shadow of a man as avoiding me passed transiently by me at a small distance" (129–30). Such moments were of interest to theorists of selective focus because they raised the possibility of multifocal processing at the level of the unconscious. Stewart had begun to explore the idea of involuntary multifocal perception in a spin-off from his thought experiment about "deeply engaged," or "occupied," individuals ignoring the clock. Rather than claiming distractions never entered consciousness, Stewart envisions a world in which we immediately forget them:

> [I]t is commonly taken for granted, that we really do not perceive the external object. From some analogous facts, however, I am inclined to suspect that this opinion is not well-founded. A person who falls asleep at church, and is suddenly awaked, is unable to recollect the last words spoken by the preacher; or even to recollect that he was speaking at all. And yet . . . sleep does not suspend entirely the powers of perception [and] if the preacher were to make a sudden pause in his discourse, every person in the congregation who was asleep, would instantly awake. In this case, therefore, it appears, that a person may be conscious of a perception, without being able afterwards to recollect it.[68]

Wherever the mind is engaged, he argued, we still—albeit unconsciously—allocate part of our focus to the outside world.

Like Leibniz, Diderot, and Sterne, Godwin had become fascinated by the notion of simultaneous multiplicity in cognition. Most unifocal theorists of the eighteenth century suggest that the chain of thought moved with an immeasurable rapidity from one idea to the next. Godwin's *Enquiry Concerning Political Justice* (1793), however, advances a theory of unconscious perception that embraces both the serial and the multiple:[69] "My eye successively remarks a thousand objects that present themselves. My mind wanders to the different parts of my body, and receives a sensation from the chair upon which I sit, from the table upon which I lean; from the pinching of a shoe, from a singing in my ear, a pain in my head, or an irritation of the breast. When these most perceptibly occur, my mind passes from one to another, without feeling the minutest obstacle, or being in any degree distracted by their multiplicity."[70] In multifocal fixation, selective focus can include an expanded range of awareness, unconsciously *including* not only ideas in our mind but also the latent feeling

of a shoe's pinch, the feel of the table beneath one's fingers, a minor headache, and a "singing" in one's ear.

If the question of "whether the mind can ever have more than one thought at any one time" was commonly answered no (to the point of becoming an "intuitive axiom" for conscious thought), the *Enquiry* argues the opposite for involuntary perception. For proof, Godwin turns to conversation, an everyday example that requires us to hold multiple thoughts in mind at once: "While I am speaking, no two ideas are in my mind at the same time, and yet with what facility do I pass from one to another? If my discourse be argumentative, how often do I pass in review the topics of which it consists before I utter them; and, even while I am speaking, continue the review at intervals without producing any pause in my discourse? How many other sensations are experienced by me during this period, without so much as interrupting, that is, without materially diverting the train of my ideas?"[71] The argument for multiplicity ends with an explicit statement: "it appears that we have a multitude of different successive perceptions in every moment of our existence."[72] In both Godwin's *Enquiry* and *Caleb Williams*, we find, only conscious thought is restricted to the singular.[73] The mind takes in multiplicity and perceives it as unity, a cognitive version of "e pluribus unum"; unconscious processing, however, allows for an additional vision of cognition as *multum in parvo*, "much in little." In this description, every sensation responds to all others, with one stimulus producing branching permutations: "not only every perception is complicated by a variety of simultaneous impressions, but every idea that now offers itself to the mind, is modified by all the ideas that ever existed in it."[74]

Godwin valued the ability to sustain multiple avenues of attention. According to the *Enquiry*, selective attention risks blocking reason, sympathy, and moral judgment. We are most likely to slip into cognitive or ethical fallacy when singularly focused: "[W]e are most frequently induced to a conduct which our habitual judgement disapproves [when] our attention becomes so engrossed by a particular view of the subject, as wholly to forget . . . those considerations which at other times were accustomed to determine our opinion. In such cases it frequently happens, that the neglected consideration recurs the instant the hurry of action has subsided, and we stand astonished at our own infatuation and folly."[75] The most frequently "neglected consideration"—and object of selective blindness in *Caleb Williams*—is sympathy, which Godwin believed must remain multifocal to produce a just political system.

Sympathy and the Benefits of Distraction

If singular focus proved a useful vehicle for critiquing political hierarchies, the cult of *sensibilité*, with its vision of individuals attuned to the changing pulses of others' sensation and its metaphorics of a sympathetic nervous system branch-

ing through the social body, symbolized the benefits of a multifocal attention flexible enough to engage the social whole. Manically focused on eliminating anything that threatens their concentration—including the object of attention itself—single-minded characters in *Caleb Williams* display a unifocal style of mind that renders them blind to their environment, as well as the emotional networks that bind humanity. Obsession yields cycles of narcissistic focus that catalyze increasing violence. Take Mr. Tyrrel, whose rivalry with Falkland (and attachment to social hierarchy) yields the persecution of his ward, Emily, and motivates the novel's secret murder. The young woman's absorption with his rival (thinking "only of Falkland" [41]) inspires in Tyrrel a violent fixation; obsession drives out sympathy. Lumping her together with Falkland, his mind reimagines his ward as a traitor: "Enemy, I could not be a worse torment to you than you are to me. Are not you continually singing the praises of Falkland? . . . That man is a legion of devils to me! . . . The lives of fifty such cannot atone for an hour of my uneasiness. If you were to linger for twenty years upon the rack you would never feel what I have felt" (53–54).[76] Adam Smith's *The Theory of Moral Sentiments* (1759) declared the primary challenge for fellow feeling was the unknowability of another's pain: "[W]e have no immediate experience of what other men feel. . . . Though our brother is upon the rack, as long as we ourselves are at our ease, our senses will never inform us of what he suffers. They never did and never can carry us beyond our own person, and it is by the imagination only that we can [conceive] of what are his sensations."[77] Godwin suggests attention posed another challenge. Tyrrel twists the logic of sympathy to the point of rationalizing torture: "Falkland haunts me like a demon," he cries. "I should be glad to see him torn with tenter-hooks" (31). The reciprocity of fellow feeling becomes an excuse to make one's own anguish the center of focus. Instead of becoming an impartial spectator to imagine another's pain, Tyrrel reverses the metaphor to imagine Emily "upon the rack" to relieve his angst. Selective focus here magnifies violence. "Revolved in the gloomy recesses of his mind," the idea of imprisoning Emily "recurred with double force" (81). Tyrrel locks up his ward and torments her until she dies. In Godwin, fixation blocks sympathy and leads to self-absorption; thoughts of Emily consume him until his mind is "wrought . . . to a degree of insanity" (81). In this equation, his brief moments of mental distress are worth two decades of pain for Emily, derided as a beggar child and "chance born brat" (54), as well as the deaths of fifty men of similar rank.

Falkland, like Arabella, spent his youth lost in chivalric romances. Consumed with ideas of "honor" absorbed from his childhood reading, Falkland contracts his rival's obsession, which leads him to avenge Emily, murder Tyrrel, and send another man to the gallows for his crime. This secret murder, in turn, becomes the object of Caleb's obsession, an all-consuming drive that leads to a final death. The servant and his master begin the novel so close that their emotions inter-

twine: "There was a magnetical sympathy between me and my patron," Caleb declares; if Falkland feels pain, Caleb "felt what it was" in an "instant" (112). This turn of phrase shows Godwin drawing once more on the scientific discourses around concentration. ("Magnets," Johnson declared in 1752, are "armed with a particular metallick composition, which concentrates their virtue.")[78] This metaphorics of sympathetic magnetism places one person at the focal and emotional center; a magnet attracts other things to *itself* without effort or agency. If sympathy is the magnet that holds society together, fixation reverses the polarity of social bonds and the mind. As Falkland's obsession with keeping his reputation "for ever inviolate" (319) spirals into mania—and aristocratic status allows him to "deprive [Caleb] of the sympathy and good will of mankind" (301)—the hero declares all sympathetic connection "extinct" (308); a shadow of his former self, fellow feeling dies. The fear of betrayal that inspires Falkland's surveillance and "worked his soul to madness" (319) leaves Falkland bereft both of fellow feeling and vitality: his body, at first "haggard, ghost-like, and wild," by novel's end takes on "the appearance of a corpse" (318). Insensible to the anguish a capital charge will cause his once-beloved master, Caleb drags him to trial, a scene the squire "survive[s] but three days" (325). As the positive feedback loop of fixation, blocked sensibility, and murder begun with Tyrrel comes full circle, the hero's obsession is declared the cause of Falkland's demise; Caleb admits to being "his murderer" (325), so to speak, by proxy—a death by lack of sympathy.

For Godwin, cycles of fixation were symptomatic of misdirected social energy; focus's power to enact social change was distorted by a political and affective system that separated individuals into hierarchies.[79] Concentration's force, however, could be redirected, its energies better used. The description of the thieves' den where Caleb hides out after his flight from prison both symbolizes the single-minded energy of concentration—one that impels people toward a goal—and envisions its sociopolitical deployment. The criminals, like the hero, are habituated to pursue a single object: "their trade was terror." With violence as their sole solution to problems, the thieves "consider wounds, and bludgeons and stabbing, as the obvious mode of surmounting every difficulty." Rendered vicious at society's margins, they nonetheless "frequently displayed an energy, which from every impartial observer would have extorted veneration" (218). This dystopic vision of "Things as They Are"—the thieves locked in a cycle where they are socially ostracized for stealing, and thus left with stealing as their only option—is balanced by a more optimistic view. In an ideal political system, attention could be redistributed and mined for value:

> Energy is perhaps of all qualities the most valuable; and a just political system would possess the means of extracting from it thus circumstanced its beneficial qualities, instead of consigning it as now to indiscriminate destruction. We act

> like the chymist who should reject the finest ore, and employ none but what was sufficiently debased to fit it immediately for the vilest uses. But the energy of these men, such as I beheld it, was in the highest degree misapplied, unassisted by liberal and enlightened views, and directed only to the most narrow and contemptible purposes. (218–19)

In order to keep concentration's energy from turning on itself to produce fixation, an individual's purpose must be directed toward multiple goals. If the criminal mind should acknowledge other subjectivities (to include "liberal and enlightened views"), the political system should broaden its view to include the marginalized. Rather than wasting concentration's excess energy, a just political system, like "a chymist," would realize one of the word's obsolete meanings: to separate ore from rock. Translating the *Works* of alchemist Johann Glauber—the first chemist to produce hydrochloric acid—into English, Christopher Packe describes the purification of valuable metals as a "means [by which] Gold and Silver may be *concentrated*."[80] Godwin imagines a version of this process applied for the political good, through which attention's energy can be "extract[ed]" and turned toward socially "beneficial" ends. In absence of such management, attention's energy would become inwardly focused, creating pockets of isolative madness at society's fringes.

In hammering home the point that singular focus could drive one to isolation and madness, the Gothic dramatized the displacement of the divided mind as the mark of insanity. William Battie's *A Treatise on Madness* (1758) argued that excessively singular attention—a disease affecting the medullary and nervous system—could lead to sustained hallucinations based on one's object of focus. The proper treatment was distraction: "Every unruly appetite must be checked," he advised; "every fixed imagination must . . . be diverted" by "amusements . . . rendered more agreeable by a well timed variety."[81] Distraction, rewritten as diversion, becomes the ideal cure.

Gothic works portrayed distraction as a healthy, even prescribed, diversion. Only in Wales, when the hero moves away from a singular mode of mind "haunted" by Falkland's "unintermitted and demoniac malice" (184) to a lifestyle that includes diverse occupations and pleasures, does Caleb find happiness. Following the natural landscape—"agreeably diversified"—the hero "relaxe[s] something in . . . precaution" (289) and takes up multiple professions. By consequence, Caleb temporarily finds "an enviable resting-place" (292): "Here I solicited employment in two professions; the first that of a watchmaker . . . the other that of an instructor in mathematics and its practical application, geography, astronomy, land-surveying and navigation" (289). Helpfully, those around him follow suit. Each "centred in himself a variety of occupations" (289): the vicar doubles as farmer, "[t]he apothecary occasionally officiated as a barber, and the lawyer was the

village schoolmaster" (290). Caleb also takes up his first real hobby, etymology, beginning a dictionary he never finishes (294). He finds himself the happiest he has ever been.

Like a number of medical manuals, Godwin's novel emphasizes the benefits of treating monomania through prescribed diversion. Battie, who argued that this madness was a form of "delusive Sensation unconnected with any other symptom," prescribed the following bland regimen: "The patient [should be] removed from all objects that act forcibly upon the nerves, and excite too lively a perception of things. . . . The patient's body and place of residence is carefully to be kept clean . . . his food easy of digestion and simple, neither spirituous, nor high seasoned and full of poignancy: his amusements not too engaging nor too long continued, but rendered more agreeable by a well timed variety."[82] In this treatment, any stimuli likely to excite attention are removed, preventing overuse or relapse. Their environment provides nothing to stimulate the taste buds or the mind. Attention is not to be elevated or oversustained; the best cure for the "fixed imagination," according to Battie, is change, which trains the subject in cognitive flexibility and a multifocal attention to pleasure.[83]

Godwin invokes this palliative distraction. Diversion is often key to revivifying Caleb's mind: "I forgot the inconveniences under which I laboured, and my mind became lively, spirited and enthusiastic" (209). In this, the Gothic joined a conversation about distraction's ability to revivify strained attention. By 1807, Christoph Willhelm Hufeland's *Some Account of Dr. Gall's New Theory of Physiognomy* translated popular medical endorsements of diversifying, switching one's focus for the populace at large: The "fatigue arising from the mind being long employed on one subject of contemplation," Hufeland argues, finds its ideal cure in novelty: "Every man, who is habituated to a life of study, knows, that after having spent hours in reflecting upon an abstract idea, . . . when he feels exhausted by the intenseness of his study, if he take up a work of fancy or taste, (nor do I mean here the idly taking up a book that neither requires nor allows of attention . . .) he will find himself as fresh to the task, his comprehension as lively, his attention as ready, as if just arisen from the healthiest and most invigorating sleep."[84] Comparing the consequences of durative attention to the pain of remaining too long in one position, doctors prescribe diversion. Distraction provides a "shift" of cognitive position that both relieves and revitalizes attention.

The process of narrating one's life, in Godwin, is a powerful distraction from cyclical ruminations. This description of life writing illuminates a benefit of distraction that increasingly intrigued medical writers and attention theorists at century's end: the possibility of voluntarily diverting oneself from pain. Caleb's descriptions of writing in prison highlight this use of selective focus to distract the mind: "I am incited to the penning of these memoirs, only by a desire to divert my mind from the deplorableness of my situation" (3). Deprived of light

and his traditional objects of attention, he turns his focus elsewhere: "Here I had neither books, nor pens, nor any thing upon which to engage my attention; all was a sightless blank. How was a mind, active and indefatigable like mine, to endure this misery? . . . Accordingly I tasked the stores of my memory and my powers of invention. I amused myself with recollecting the history of my life" (184–85). If, as doctor and philosopher James M. Adair claimed, attention is "the mother of science," fixation was the father of misery. *A Philosophical and Medical Sketch of the Natural History of the Body and Mind* (1787) lays out both problem and cure:

> Sometimes ideas obtrude themselves spontaneously, repeatedly, and painfully, upon the mind; nor can it dismiss them at will. This is one great source of human misery; and as reason has very little power to counteract these painful impressions, the attention ought to be diverted by other strong and more agreeable impressions: Hence the benefit of change of place, amusements, and sometimes interesting occupations of the mind, to those who are depressed by grief, or labour under such corporeal maladies as excite painful sensations in the mind; and much relief has been obtained by opposing a passion of a contrary nature.[85]

Diversion, that is, was the best treatment for alleviating the pain of fixation and increasing pleasure. In a recommendation that contrasts productively with Beattie's prescription of an anesthetized removal from stimuli, Adair suggests the ideal was to find a challenging occupation to distract the patient: "interesting occupations of mind" assuage a fixation on painful thoughts. For Caleb, drafting his life story in the dark becomes a diversion from his anguished present: "[O]ne of the motives which induced me to the penning of this narrative was to console myself in my insupportable distress. I derive a melancholy pleasure from dwelling upon the circumstances which imperceptibly paved the way to my ruin. While I recollect or describe past scenes which occurred in a more favourable period of my life, my attention is called off for a short interval from [my] hopeless misfortune" (123). With narration cast as melancholic distraction, the very existence of the novel, *Things as They Are; or, The Adventures of Caleb Williams*, signifies the affective paradox of selective focus. Concentrating on the story of life as it *was* diverts him from the pain of the world as it *is*.

Even as writing is portrayed as distraction from angst and displaced melancholic fixation, it becomes an excuse for metacommentary on attentional capture used to ratchet up suspense. In this, Godwin joins a Gothic tradition that structured storytelling around concentration, fixated lulls, and single-minded suspense that stretched from Horace Walpole and Ann Radcliffe to his daughter, Mary Shelley.[86] The translator's preface to Walpole's *The Castle of Otranto* (1764) declares that "the zeal of the author . . . would enslave a hundred vulgar minds. . . . Never is the reader's attention relaxed."[87] *Frankenstein*'s opening, an epistolary frame narrative, mirrors and extends this aesthetic of obsessive focus.

The narrator's letter describes his quest to discover "the secret of the magnet," an Arctic journey he pursues with the zeal of the empirically obsessed. Concentrating his thoughts on a single object, Walton finds, organizes his mind: "These reflections have dispelled the agitation with which I began my letter, and I feel my heart glow with an enthusiasm which elevates me to heaven; for nothing contributes so much to tranquillize the mind as a steady purpose—a point on which the soul may fix its intellectual eye."[88] If monomania is motivated by a desire to codify the world, as Van Zuylen argues, Walton's quest to discover the laws of magnetism at the North Pole provides an example of focus used to yield a temporary sense of stability: "I may there discover the wondrous power which attracts the needle; and may regulate a thousand celestial observations, that require only this voyage to render their seeming eccentricities consistent for ever."[89] Writing about this magnetic possibility of permanence doubles as distractor and tranquilizer; it soothes the mind and reveals a dangerous circularity: his "thoughts were turned into the channel of their earlier bent."[90] Monomania, inscribed, becomes its own cause for concern. The epistle that began asking his sister to rejoice that "no disaster has accompanied . . . an enterprise which [she has] regarded with such evil forebodings" leaves us with a sense of impending doom: no disaster has occurred—yet.[91]

Rewriting Suspense: Interruption and the Gothic Sublime

Narratologist Heta Pyrhönen calls suspense the result of "temporal-affective immersion in a narrative, [a] tension-filled desire to know its outcome [amid] anxious uncertainty."[92] For the eighteenth century, Gothic writers were the masters of this narrative *frisson*. In her preface to the *Old English Baron: A Gothic Story* (1778), Clara Reeve praised Gothic fiction's blending of novel and romance, in particular for capitalizing on the latter's ability "to excite . . . attention."[93] John Aikin, cowriting with his sister Anna Letitia Barbauld, claimed that this aesthetic of suspense relied on an involuntary attention that impelled readers through a tale via, rather than in spite of, their horror. According to "On the Pleasure Derived from Objects of Terror" (1773),

> The pain of suspense, and the irresistible desire of satisfying curiosity, [inspires an] eagerness to go quite through an adventure. . . . We rather chuse to suffer the smart pang of a violent emotion than the uneasy craving of an unsatisfied desire. . . . [T]his principle, in many instances, may involuntarily carry us through what we dislike [and] not only force us through dullness, but through actual torture. . . . When children, therefore, listen with pale and mute attention to the frightful stories of apparitions, we are not, perhaps, to imagine that they are in a state of enjoyment, any more than the poor bird which is dropping into the mouth of the rattlesnake—they are chained by the ears, and fascinated by curiosity.[94]

To Edmund Burke's mind, this effect reflected the sublime's aesthetic power: a capacity to produce "astonishment"—(etymologically, to petrify, or be rendered "stone")—and awaken the mind. *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (1757) claimed an engagement with sublime objects would yield a "state of the soul, in which all its motions are suspended. . . . The mind is so entirely filled with its object, that it cannot entertain any other. . . . Hence arises the great power of the sublime, that . . . it anticipates our reasonings, and hurries us on by an irresistible force."[95] Suspending the mind in sublime fixation, Gothic horror expels all but its object, leaving the fascinated reader both frozen and driven on.

One of the first works to use "focus" to describe narrative force, William Cowper's poem "Conversation" (1781), used attention's scientific idioms to declare that a story able to unite multiple story lines—here, "rays of information"—toward one point would have a strong claim on audiences:

> A tale should be judicious, clear, succinct,
> The language plain, and incidents well-link'd,
> Tell not as new what ev'ry body knows,
> And new or old, still hasten to a close,
> There centring in a focus, round and neat,
> Let all your rays of information meet:[96]

At first, *Caleb Williams*'s suspense seems to follow this model; Godwin claimed his purpose was a "unity of plot" that would give "an overpowering interest to [his] tale"; if, in Cowper, focus came from a short concentrated plotline, in Godwin, the goal was to develop a narrative structure that could "impel" attention through a novel (337).[97] The preface to the standard edition declares victory, ending with the tale of a reader who stays up all night to finish: receiving "my book late one evening, [he] read through the three volumes before he closed his eyes" (341).

If true, *Caleb Williams* would fall within the aesthetic tradition described in *Absorption and Theatricality*, which argued that the primary goal of depicting rapt engagement in midcentury French art—from Fragonard's *La Liseuse* to Chardin's *Soap Bubbles*—was to provide the illusion of an attention so deep the painting's figure seemed oblivious to the viewer. This rhetorical technique, according to Fried, was capable of freezing a viewer: "For Diderot and his colleagues, as we have seen, the painter's task was above all to reach the beholder's soul by way of his eyes. . . . [A] painting, it was claimed, had first to attract (*attirer*, *appeller*) and then to arrest (*arrêter*) and finally to enthrall (*attacher*) the beholder, that is, a painting had to call to someone, bring him to a halt in front of itself, and hold him there as if spellbound and unable to move."[98] To be absorbed in a novel, however, was to be enthralled for a far longer period. As

Godwin and his contemporaries note, Gothic suspense could produce readers who mirrored the overfocus of its characters through an aesthetic fixation that left them prone to cognitive suspension and addicted to tales of terror. Everyday eighteenth-century readers of the genre describe themselves in a half-absorbed, half-amused reverie that, despite their comments on a work's faults, continues late into the night. In 1798, Elizabeth Gurney reports on reading Matthew Lewis's *The Monk* (1796): "This evening I have been reading a good deal in the 'Monk.' I don't know whether it hurts the mind or not [and] I think it [a] loss of time. . . . I should not go on reading it, but yet as I have begun it I think it better to go on."[99] Thomas Carlyle in 1817 confessed of the same work: "It is the most stupid & villainous novel that I have read for a great while . . . the other night I sat up till four o'clock."[100]

The characters of *Caleb Williams* are described as vulnerable to attentional capture, especially by the suspense of rhetorically powerful narratives. As the circle of surveillance around the hero widens, narrative absorption, too, expands—from the individual to British society to Godwin's readers. As a young farm boy, Caleb (like Falkland) reads novels with a consuming drive: "[I had] an invincible attachment to books of narrative and romance. I panted for the unravelling of an adventure, with an anxiety, perhaps almost equal to that of the man whose future happiness or misery depended on its issue. I read, I devoured compositions of this sort. They took possession of my soul" (4). Later, he is joined in his immersion by a band of thieves; the hero's attention, supernaturally primed for survival, is now drawn to stories that endanger his safety as well as to others' engagement with them. When the criminal circle with whom Caleb takes refuge discovers the tale Falkland circulates about him—a blend of criminal biography, want ad, and financial bribe—their focus immediately catches his notice: "Two of our people had been sent to a town [to get supplies]. After having delivered these to our landlady, they retired to one corner of the room, and, one of them pulling a printed paper from his pocket, they mutually occupied themselves in examining its contents. I was sitting in an easy chair by the fire. . . . Having read for a considerable time, they looked at me, and then at the paper, and then at me again . . . a circumstance . . . which involuntarily attracted my attention" (221–22). By the concluding trial, Caleb has not only escaped his pursuers but also turned the tables on those taking advantage of the political and fiscal skewing of focus; he masters the rhetorical power of sympathy to capture attention and extends it to the jury: "I poured [my feelings] out with uncontrollable impetuosity, for my heart was pierced, and I was compelled to give vent to its anguish. Every one that heard me was petrified with astonishment. Every one that heard me was melted into tears. They could not resist the ardour with which I praised the great qualities of Falkland; they manifested their sympathy in the tokens of my penitence. . . . [T]he artless and manly story . . . carried conviction

to every hearer" (323–24). This final tableaux of fixated attention and suspense redeems as *sensibilité* the loss of cognitive control inherent in his soul-possessed reading style and the "involuntary" capture of his attention in the thieves' den. the audience's petrification facilitates an emptying of self that opens them to his tale's sympathetic power.

If we are tempted to read such scenes of concentration in *Caleb Williams* as embedded frames for readerly immersion, we should look again. In context, Godwin's portraits of absorption, like Johnson's scenes of distraction, do a rhetorical about-face, urging us to pause—perhaps even put the book down—to project narrative possibilities and produce new frameworks to organize and interpret events. If there is an attentional surfeit in Godwin's gothic, as Stewart claims of Poe, his nineteenth-century American inheritor, it is not the ardent panting after a mystery's resolution but an oft-interrupted quest to "unravel" and integrate the tangled narrative threads that make up his labyrinthine novelistic plurality. The result is a move away from the singularity of Peter Brooks's *Reading for the Plot*, which theorizes plot as the "organizing line, [or] thread of design" in narrative, a "structuring operation elicited in the reader trying to make sense of those meanings that develop only through textual and temporal succession" and "a form of desire that carries us forward, onward, through the text."[101] *Caleb Williams* is closer to Pyrhönen, for whom suspense is the creative result of "any device that allows the projection of possible narrative paths" and thus cognitively plural: "Suspense . . . relies on a structured horizon of expectations that incorporates a double temporal perspective [that] depends on our ability to envision events and project possible scripts for action based on the desires, plans, and goals of characters. . . . [It] is heightened when a situation or an event enables us to chart the future into diverging, but reasonably computable outcomes. Its climax begins when narrative possibilities are reduced to clear-cut binaries such as success or failure."[102] In Godwin, narrative possibilities are rarely limited to two. The thieves' joint focus on Caleb's want ad, for instance, a scene that captures the hero's singular attention, produces a radically different effect in readers. We automatically begin to plot out a series of potential narrative turns: the criminals, out of shared allegiance, may protect him; financial conquest could divide their attention, allowing him to escape; the whole group might betray him for the money, etc. The goal of this aesthetic is not readers suspended—fixated by Caleb's story—but able to step back and recognize connections among micro-level incidents as they unfold and macro-level depictions of the political, social, and cognitive structures that constrict individual behavior.

How then does a narrative meant to pique and sustain interest create a multifocal framework of suspense? Reading, neuroscientists note, is an activity that, once learned, quickly becomes automatic; its seeming ease obfuscates the intricate

neural networks the brain needs to integrate to orchestrate this task.[103] Godwin's *Enquiry* raised this question about the multiplicity of unconscious mental processes in reading as early as 1793:

> Let us suppose that I am at present employed in the act of reading. I appear to take in whole words and indeed clusters of words by a single act of the mind. But let it be granted for a moment that I see each letter successively. Yet each letter is made up of parts: the letter D for example of a right line and a curve, and each of these lines of the successive addition or fluxion of points. . . . There must therefore . . . be an infinite succession of ideas in the mind, before it could apprehend the simplest objects with which we are conversant. But we have no feeling of any such thing. . . . Thousands of human beings go out of the world, without ever apprehending [this process].[104]

Neuroscientists Anne Dietrich and Oliver Stoll describe the effortless attention of flow—a cognitive state involved in activities from reading to elite musical and athletic performance—as requiring us, paradoxically, to work at high rather than low cognitive capacity:

> Autotelic experiences, popularly known as flow . . . occur when one becomes so deeply engrossed in a task and pursues it with such passion that all else disappears, including any sense of the passage of time. . . . [Traditional] theories of attention and action . . . assume that higher task demands require more effort, both objectively, in terms of caloric consumption by the brain, and subjectively, in terms of perceived mental effort. In flow, however, the opposite appears to be the case. Here the perceived mental effort decreases, sometimes to the point of utter effortlessness. . . . In flow states, in fact, action seems to be entirely outside of conscious awareness—the experience is often described as if it happens by itself, without any effort at all.[105]

If Sterne's goal in *Tristram Shandy* was to exceed our cognitive capacities for simultaneous processing, Godwin's was to hover—suspended—at the edge of flow, inviting absorption while sustaining a narrative complexity just at its brink. In this aesthetic, an increase in narrative complexity, or a well-timed cue, could push readers over the cusp of automatism into metareflection. Even moments when the narrator steps in to provide commentary on his story's suspense (e.g., "The period at which my story is now arrived seemed as if it were the very crisis. . . . Incident followed upon incident in a kind of breathless succession" [131]) interrupt the plot's forward motion, inviting us to stop reading and imagine a branching chain of events. Suspense thus served as the translation point between Gothic aesthetics and the century's theorizations of focus. In experimenting with multifocal suspense, *Caleb Williams* integrates critiques surrounding focus, concentration, and absorption, theorizations of attention as

selective blindness, and discussions of fixation as a treatable medical pathology to produce a plotline able to sustain absorption and accommodate distraction.

Hoping to encourage layered attention, Godwin doubles and redoubles suspicion to the point that the trustworthiness of hero and narrator—thus the veracity of the entire narrative—becomes unstable. The novel, built around narrative unreliability, embeds branching multifocal demands within its suspense: "from beginning to end," Emily Anderson notes, "*Caleb Williams* interrogates the construction of narrative, thereby raising a central problem of empiricism: are the stories we tell about the world true? . . . [A]lmost every coherent narrative is false: the romances that Williams and Falkland read, the stories people tell about them."[106] Doubts multiply over the novel's course, as the hero displays skills and habits—spying, breaking locks, colluding with criminals, prison escape, eluding police—unusual in your everyday servant-secretary and librarian. Viewed with closer attention, the hero's attempts to explain his knowledge and actions tend to collapse in on themselves. To justify breaking open his master's box of manuscripts, for instance, Caleb pleads temporary insanity. Stretching the conceit of lost agency near its breaking point, he blames his actions on an "unexplained and involuntary sympathy" with fire: "I have always been at a loss to account for my having plunged thus headlong into an act so monstrous. There is something in it of unexplained and involuntary sympathy. One sentiment flows by necessity of nature into another sentiment of the same general character. This was the first instance in which I had witnessed a danger by fire. All was confusion around me, and all changed into hurricane within. The general situation to my unpractised apprehension appeared desperate, and I by contagion became alike desperate" (133). Entranced by the flames, the hero claims his mind has been left in a state of chaos. Though Caleb's curiosity about Falkland provides a more believable motive (and a page earlier he claimed to be so focused he was utterly oblivious to the flames), he declares, in an improbable turn, that the fire's chaotic energy has been drawn via a magnetic sympathy into his brain. An unreliable narrator, in fiction, requires us to hold at least two interpretations of a story in mind: one version crafted from belief, another from suspicion that undercuts the truth claims of the first. The challenge of multifocal simultaneity—following these clues while tracking plot, holding in mind both belief and doubt—not the tale's unity of plot, draws us (and our attention) to the novel's end.

This uncertainty extends even to the preface, adding an ironic layer to Godwin's mirroring of his characters' focus:

> In May, 1791, I projected this, my favourite work, and from that time gave up every other occupation that might interfere with it. (335)
>
> I formed a conception of a book of fictitious adventure, that should in some way be distinguished by a very powerful interest. *Pursuing* this idea, . . . I *bent* myself

> to the conception of a series of adventures of flight and pursuit; the fugitive in perpetual apprehension of being overwhelmed with the worst calamities, and the pursuer, by his ingenuity and resources, keeping his victim in a state of the most fearful alarm. . . . *I was next called upon* to conceive a [plot] to account for the impulse that the pursuer should feel, incessantly to alarm and harass his victim, with an inextinguishable resolution [and] a secret murder, to the investigation of which the innocent victim should be impelled by an unconquerable spirit of curiosity. (336–37; my emphasis)

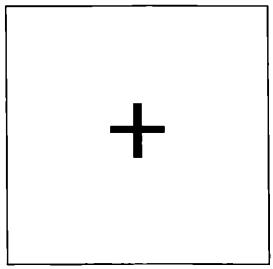
> I wrote only when the afflatus was upon me. I held it for a maxim, that any portion that was written when I was not fully in the vein, told for considerably worse than nothing . . . [Despite] ceaseless heartaches and industry . . . I felt ever and anon impelled to repeat my effort. (338, 341, 336)

Beneath these hyperbolic descriptions of encompassing focus is interwoven a more critical view of unifocal attention that emphasizes the importance of distraction, diversion, and focal interruptions, as well as narrative multiplicity. Though he claimed to have written the entire novel in a twelve-month burst, Godwin admits that he "wrote for the most part but a short portion in any single day," composing by fits and "starts; sometimes for a week or ten days not a line" (338). Rather than a detriment, rest is declared a necessity for creative labor. "The bow" of the mind, he writes, "will not be for ever bent" (341).

This style of suspense, which allows for—even encourages—diversion, discourages readers from modeling fixation, instead prompting them to view the narrative's political allegory (and their place within it) as well as the dangers inherent in ignoring justice, sympathetic exchange, or one's surroundings in the name of reading. It is no accident that the reader described as unable to put *Caleb Williams* down till daybreak was Joseph Gerrald, a political radical of the 1790s and fierce advocate of universal suffrage. Unlike readers who "hastily gobble [the story] up . . . without chewing and digestion" (341), a man of feeling, like Gerrald, will put a novel down and turn to politics. The preface thus concludes in a moment that resists the dangers of fixated attention. Exemplifying the play between focus and diversion, the reader "went over it in a few hours, shut the book, laid himself on his pillow, slept and was refreshed." When all is over, he cries: "To-morrow to fresh woods and pastures new" (341).

Fixation and the Science of Obsession

The eighteenth-century traditions surrounding selective attention—as magnified sight and cause of blindness, as distraction and scientific boon, as concentrated power and medicalized pathology—have left cognitive science with a unique inheritance. The experimental framework that supports neuroscientific studies of selective focus and visual attention reflects a legacy from microscopy,

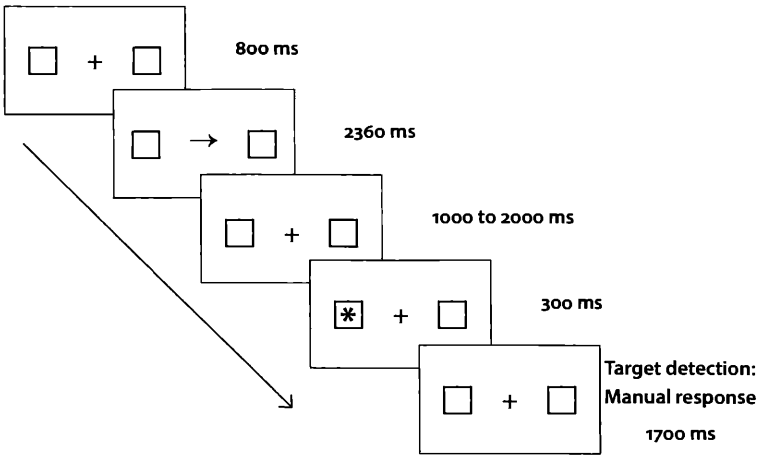


The fixation cross is used in a wide variety of cognitive and behavioral experiments of attention. It provides participants with a center point on which to focus their gaze and thus a useful contrast for any experiments testing subsequent changes in eye movement or brain activity in response to new stimuli.

optics, and mathematics. Some of the most famous—and robust—experiments on selective focus investigate our ability to sustain focus while excluding carefully placed distractions, modeling the *Encyclopédie*'s description of attention as "a species of microscope" that increases clarity by "draw[ing] aside what can disturb it."

Posner's cueing paradigm, for instance, opens—as is common in studies of visual attention—with subjects focused on a "fixation cross," used to establish a baseline of focalized attention.[107] In the original experiment, after training their gaze on the cross-point, participants were cued by an arrow to expect the presentation of stimulus on the left or right. The fixation cross was flashed again prior to the presentation of the actual stimulus, which then appeared in the cued or not-cued location. Objects in the cued, or expected, location (i.e., where the arrow points) were quickly identified while objects in noncued locations required additional processing time, leading Posner to argue that subjects directed a "mental spotlight" of attention to the expected stimulus location. While the study's results were pertinent then because they suggested a predictive element of attention that "moves" before the eye, its experiment design and the theoretical paradigm it yielded are relevant here because they employ the eighteenth-century metaphorics of focus; attention is centralized, a spotlight fixed on a center point from which all distractors deviate.

This stands in stark contrast to a second, more recent, movement in neuroscience toward understanding networks of coactivation, functional connectivity, and the dynamism of cognition. Indeed, eighteenth-century interest in attention as selective blindness lives on in research on inattentional blindness. These studies investigate how, when, and to what extent certain forms of focus—auditory, visual, tactile—can distract us from noticing environmental change. These two subfields of attention studies coexist, often without speaking,



Stimulus time course for Posner cueing task.

forming their own disciplinary Rubin vase: one group of scholars focused on selective attention, another on what concentration occludes. If visual studies of selective attention tend to rely on the "spotlight" as their dominant idiom, experiments on inattentional blindness or change blindness invert the metaphorics of concentration. The inattentional blindness paradigm often describes a "diffuse attention" that can coexist with a focal spotlight and includes the background processing of stimuli typically overshadowed by conscious focus—taken in as part of an encompassing attentional set.[108]

In neuroscience more broadly, the spotlight view of selective focus continues to support an empirical structure that defines "correct" neuroscientific practice as isolating a single variable as its point of study in order to avoid potential confounds. Praises of singular focus as the ideal mind-set for scientific progress can also be seen as the foundation for cognitive science's second, darker eighteenth-century inheritance, so rarely acknowledged. The simultaneous portrayal of focus as the key to Enlightenment progress and as a pathology in need of treatment continues in the divide between neuroscientific studies of selective attention and various psychiatric and attentional disorders, specifically obsessive-compulsive disorder, or OCD. In cognitive experiments on selective attention, successful monofocus—be it efficient performance on the Posner cueing task, for instance, or subjects' ability to reliably select signaled objects over "distractors"—continues to define and delimit relevant results (and thus statistically significant data). The famed "noncompliant" subject who falls asleep in the middle of the test is excluded. At the same time, fixated attention continues to be pathologized. The diagnostic criteria for OCD in the latest *Diagnostic*

and Statistical Manual of Mental Disorders (DSM-5) echo the language of Gothic concentration:

> Obsessions are defined by . . . recurrent and persistent thoughts, urges, or images that are experienced . . . as intrusive and unwanted [and] cause marked anxiety or distress. . . .
>
> Compulsions are defined by . . . repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly. . . .
>
> The obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.[109]

Symptoms, Zizek argues in *The Sublime Object of Ideology*, are "not discovered . . . but constructed retroactively—the analysis produces the truth; that is, the signifying frame which gives the symptoms their symbolic place and meaning."[110] To be diagnosed with OCD is to have one's mental narrative framed by the historical language of concentration as madness: cyclical thoughts driven as if by their own volition, cognitive behaviors rendered increasingly rigid (and durative) over time, and a disconnect with ideological networks of sociopolitical engagement.

Selective attention is thus caught between two historically sedimented paradigms. We still find focus valued for its own sake, ignoring the question of object, duration, and personal consequence. Attention ceases to be culturally valuable, however, if we deem an individual's point of concentration inappropriate. In the DSM-5, compulsions are defined as unhealthy fixations because the subject's focus has departed from—or settles on an object or task deemed irrelevant to—their primary concern: "behaviors and mental acts [that] are not connected in a realistic way with what they are designed to neutralize or prevent."[111] When dominant ideology legislates that one's behaviors connect "realistically" with one's goals, this style of recursive or durative focus is termed perfectionism, the ideal kind of "personal flaw" to admit when asked to identify one's faults in a medical school application. The enduring attention of the CEO who works weekends and travels the globe to advance her own enterprise is the lionized subject of the *Wall Street Journal*, while the same fixative element, concentrated on another kind of project—say, Occupy Wall Street—is rewritten as the fanatical (and potentially dangerous) attention of the radical. In the sciences, sustained attention to a single object or task is often rewarded with fiscal or academic compensation, with subjects paid for their time and attention, granted extra credit (increasing their GPA and sociopolitical standing once graduated), or placed under technological surveillance (video, eye tracking, etc.) that, like

Falkland's gaze, heightens subjects' performance. Directed attention, carefully incentivized, is well documented in our scientific literature and represented as exemplary behavior in our culture. Yet the value of distraction inheres precisely at the point where intense focus not only inhibits vision in a literal sense but narrows our worldview, limiting the scope of a life to a single task thoroughly pursued and rarely completed.

Divided Attention

Characterization and Cognitive Richness in Jane Austen

When Elinor and Marianne Dashwood enter a London shop, they find a crowd of customers and shopkeepers too busy to attend them. A toothpick case is to blame: "[A gentleman] was giving orders for a toothpick-case for himself, and till its size, shape, and ornaments were determined, . . . he had no leisure to bestow any other attention on the two ladies, than what was comprised in three or four very broad stares; a kind of notice which served to imprint on Elinor, the remembrance of a person and face, of strong, natural, sterling insignificance."[1] What to make of such a scene? From the outset, we have rudeness: a socially inappropriate distribution of focus: a gentleman so taken by his toothpicks that he cannot pay due attention to the ladies. His forced glances at the Dashwood sisters break the codes of gentlemanliness twice over, giving them the wrong kind of notice, ogling, rather than their right: polite attention. The episode is woven around a tight economy of focus and decorum; Mr. Robert Ferrars's unchecked attention to one thing—a toothpick case—deprives others of it, robbing the Dashwoods of the shopkeeper's notice.

According to British diplomat Lord Chesterfield, politeness relied on skillful divisions of focus, facilitating full comprehension of a social scene: "You should not only have attention to every thing, but a quickness of attention, so as to observe, at once, all the people in the room; their motions, their looks, and their words; and yet without staring at them, and seeming to be an observer. This

quick and unobserved observation is of infinite advantage in life, and is to be acquired with care."[2] Decorum required one to divide focus among many things at once (noting each person's gestures, looks, and bon mots; the propriety of one's own glances; and the interplay of the social milieu) without calling attention to oneself. Proper focus was innately plural.

Unable to divide his concentration, Mr. Ferrars is stripped of both politeness and the observations that produce cognitive richness in *Sense and Sensibility*. His inability to attend to two things at once (a toothpick case *and* the Dashwood sisters) reduces him to a minor character; single-mindedness embodies his "sterling insignificance" in the novel. Elinor's narrative importance emerges by contrast; his monofocus illuminates her complexity, reflected in an ability to remain aware of many things at once:

> there was not a person at liberty to attend to their orders; and they were obliged to wait. All that could be done was, to sit down at that end of the counter which seemed to promise the quickest succession; one gentleman only was standing there, and it is probable that Elinor was not without hope of exciting his politeness to a quicker dispatch. But the correctness of his eye, and the delicacy of his taste, proved to be beyond his politeness. . . . [H]e had no leisure to bestow any other attention on the two ladies, than what was comprised in three or four very broad stares; a kind of notice which served to imprint on Elinor, the remembrance of a person and face, of strong, natural, sterling insignificance, though adorned in the first stile of fashion. Marianne was spared from the troublesome feelings of contempt and resentment . . . by remaining unconscious of it all.[3]

Attending simultaneously to the impending sale, her sister's distraction, and the gentleman's rudeness, Elinor reveals the strength and breadth of her mind. In compensating for her sister's obliviousness and taking over the burden of navigating the social scene, the heroine also receives what Marianne is spared: the novel's central role.

Attention, writes Alex Woloch, is the "coin" of Austen's narrative economy; her protagonists' psychological depth grows out of a character structure whose hierarchy relies on unequal divisions of attention and narrative space.[4] Minor characters, compressed to take up little room, are flattened, setting into relief the major, whose claim to the lion's share of narrative makes them rounder characters. Yet, in Austen, mental complexity also develops through a narrative system that asymmetrically distributes the capacity for divided attention—the ability to sustain multisensory awareness as well as the cognitive flexibility to be distracted—among fictional minds. Her novels literally divide the capacity for attention among characters, allocating narrative space to figures according to the relative sophistication of their concentration. A rich mental life belongs to those who multifocus; a capacity for simultaneous processing evokes a capa-

cious mind. Mental complexity, or what Palmer would call "the whole fictional mind," emerges through a system that grants her heroines the ability to multitask and deprives minor characters of the same.[5]

With Austen, we encounter the final category in this history of distraction: *divided attention*. Scientists today invoke the term to discuss tasks that require us to "attend to several stimuli at once, or even try and carry out two tasks simultaneously."[6] As neuroscientist Anthony Ward explains, life requires multitasking; take driving, for example, which

> requires us to divide our attention [and] pay attention to multiple sources of information at once. . . . [O]ne has to pay careful attention to the road ahead. . . . The steering wheel must be constantly adjusted to keep the vehicle moving along the required trajectory. One also has to pay attention to events happening behind the vehicle, requiring frequent glances at the rear view mirror [all while glancing] from time to time at the speedometer, to ensure that one is sticking within the speed limit. . . . Skilled drivers might be surprised to be reminded of all the intricate tasks they routinely accomplish when driving from A to B. To learner drivers, the whole thing initially seems quite daunting.[7]

Moments of simultaneous processing lie at the heart of Austen's fictions; characters in her novels divide attention in still more sophisticated ways, maintaining the situational awareness that lapsed so often in *Betsy Thoughtless*. While, in Haywood, multisensory stimulation almost inevitably yields overload, figures in Austen often succeed in performing activities that require such coordination. Jon Driver and Charles Spence emphasize the importance of such cross-modal integration in daily life: "[P]eople often have to coordinate their attention across the modalities, selecting information from a common source (e.g. the speech-sounds together with the lip-movements of someone speaking in a noisy room). . . . Results from behavioural studies [in] neuroimaging and neurophysiology . . . highlight how information from various sensory systems (e.g. visual, auditory, somatosensory, proprioceptive and vestibular) is integrated to construct multimodal representations of space, within which attention can be directed."[8] Yet, as Austen also recognized, one cannot maintain Chesterfield's recommended "attention to everything" ad infinitum. Our attentional bandwidth has limits. Studies of distracted driving suggest that our capacity to divide attention decreases with cognitive load; "driving performance," Ward notes, "will suffer if combined with other tasks, particularly if those competing tasks require a high degree of concentration."[9] Even chatting on a cell phone (handheld or free) leads to decreased performance.[10] Splitting our resources between two similar modalities (visual, auditory, etc.) creates still higher cognitive demand, and many states penalize texting drivers because the demands of looking at an extra object risks radically exceeding attentional capacity.[11]

Sterne and Godwin's experimentation with narrative rhythm and structures of suspense grew out of a desire to explore our capacities for multifocal processing; Austen's innovative characterization emerged from an interest in reconceptualizing divided attention as the sign of a flexible mind moving through everyday life. In her novels, multitasking is both a necessity for navigating the daily and a faculty that, overtaxed, would exceed its limits and fall into distraction. Her novels thus raise questions now central to studies of divided attention: How many things can we attend to at once? What kind of activities can be performed concurrently? At what point will multitasking overwhelm us, and how does the capacity to sustain it vary across individuals?

The Power of Multitasking in *Pride and Prejudice*

At the end of *Pride and Prejudice*, Elizabeth asks Darcy "to account for his having ever fallen in love with her": "Now be sincere," she asks, "did you admire me for my impertinence?" Darcy replies: "For the liveliness of your mind, I did."[12] Jane Austen frequently uses three main words to describe a character; for Elizabeth, these are "lively," "playful," and "quick," evoking the heroine's liveliness and quickness of mind. The nuances of her "lively, playful disposition" only emerge in full, however, when Elizabeth's cognitive habits are compared with those of the minor characters by whom she's surrounded (51). When Mr. Bennet introduces Elizabeth into the novel, he sets her against her siblings: " 'They have none of them much to recommend them,' replied he; 'they are all silly and ignorant like other girls; but Lizzy has something more of quickness than her sisters' " (45).

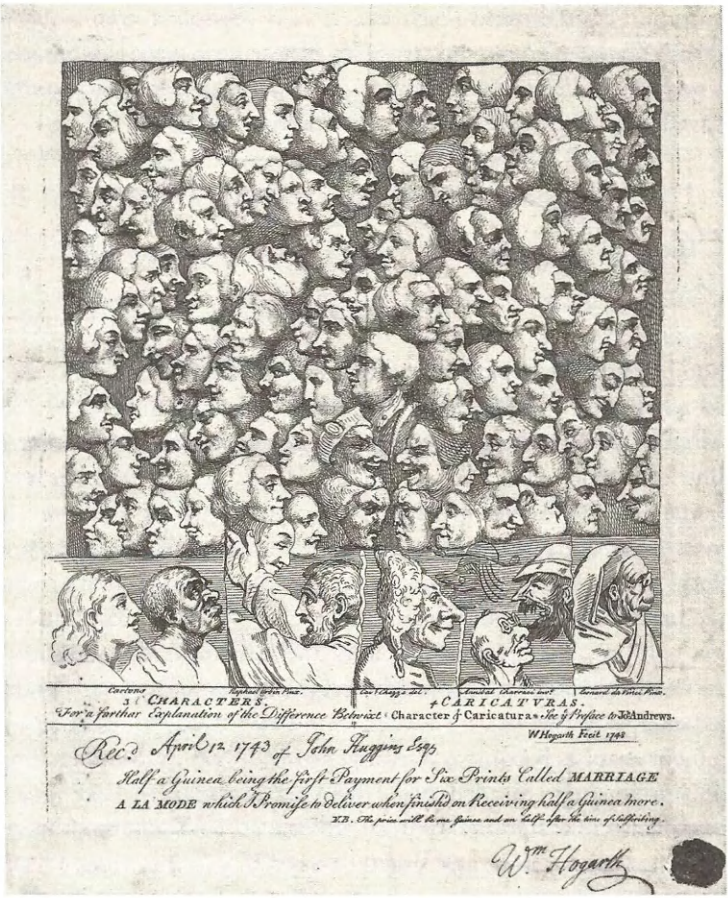
In this scene, Austen cues the reader to pay close attention to Elizabeth's quickness by having Mr. Bennet describe it explicitly. She also encourages the reader to understand character in comparative terms: Elizabeth is noteworthy because she possesses a swiftness that Lydia, Mary, Kitty, and Jane lack. Throughout, the novel rewards such attention; Austen strategically modulates her narrative so that implicit comparisons among characters *convey*—rather than describe—the liveliness that makes Elizabeth vibrant. As Austen works to capture Elizabeth's intellectual vivacity within what Blakey Vermeule calls the "fragile casing of narrative," however, she also develops a unique structure for characterization using representations of attention—a paradigm in which *distraction* constructs a heroine's liveliness of mind.[13] Darcy may say as much about Austen's narrative, then, as he does about love when he says: "I cannot fix on the hour, or the spot, or the look, or the words, which laid the foundation. . . . I was in the middle before I knew that I *had* begun" (378). Darcy cannot pin down his impression of Elizabeth's quickness to one moment because Austen has so finely integrated distraction within the novel's texture; Elizabeth's vivacity—and the techniques that produce it—are embedded almost intangibly within the story's structure.

A number of critics have recognized the effects of Austen's structure of characterization without being able to pinpoint their cause, to say *how* they give Elizabeth energy and life. According to Tony Tanner, Elizabeth has a "dimension of complexity, a questing awareness, [and] a mental range and depth" that appears to be "trapped in a constricting web of . . . simple people."[14] Woloch suggests that this depth is the effect of the "central tendency of the narrator" in *Pride and Prejudice* "to closely link the description of an 'intricate' mind with a counterpoised description of a 'simple' one."[15] Understanding how attention structures the novel's characterization gives such arguments specificity and texture; as I will show, Austen links intricate minds with distraction and simple minds with narrow focus; the *comparative* "reading" of these minds and attention spans gives Elizabeth's awareness the illusion of range and depth.

Fittingly for a novelist interested in divided attention, Austen balances and integrates traditional and modern theories to produce this effect. *Pride and Prejudice* repeatedly shows Elizabeth capable of dividing her focus, providing us with the sense of a full mind with enough layers—and strength—to be the center of narrative attention. Yet cognitive richness also requires distraction. If divided attention marks characters' depth, the ability to accommodate distraction—a focus that can shift—is the signature of mental flexibility. Austen pairs Elizabeth's powers of attention with a capacity for distraction, an ability to distribute concentration that reveals a mind capable of growth.

This balance of attention and distraction cannot produce cognitive richness on its own, however. To offset the value of both states, Austen surrounds her heroine with focally deficient characters on both sides. The novel needs the narrower minds of characters like Lydia and Mr. Hurst to turn Elizabeth's multitasking into a marker of depth; yet these are supplemented by a cadre of extra-attentive figures like Mary Bennet and Lady Catherine de Bourgh, whose inability to interrupt concentration offsets the heroine's mobility of mind. *Pride and Prejudice* brings the attention of minor characters into narrative focus so that we can compare the relative quality of their concentration to those of her protagonists. Austen's allocation of simpler mental styles to minor characters serves not only to convey but to narratologically construct a heroine's cognitive richness.

E. M. Forster's classic division of major and minor characters at first seems to rely on this idea: a figure's complexity emerges by way of comparative dimensionality: "a novel that is at all complex often requires *flat* people as well as *round*, and the outcome of their collisions parallels life more accurately."[16] This model of the fictional mind grows out of and marks a departure from eighteenth-century theories about "fleshing out" a character. "Neoclassical critics," Deidre Lynch notes in *The Economy of Character*, "raised questions about quantity, about the fine line between the more and the less" that "asked the judicious reader to *count*, to think about how many strokes or traits of character


Cartoons
Raphael Urbin Pinx.
Cav.r Hogg.s del.
Simoneau Charrier sculp.
Gerard de Lairesse Pinx.
CHARACTERS.
CARICATURAS.
For a further Explanation of the Difference Betwixt Character & Caricatura see the Preface to Joseph Andrews.
W.m Hogarth Fecit 1743
Rec.d April 12. 1743 of John Huggins Esq.r
Half a Guinea being the first Payment for Six Prints Called MARRIAGE
A LA MODE which I Promise to deliver when finished on Receiving half a Guinea more.
N.B. The prints will be one Guinea and an half after the time of subscribing.
Wm. Hogarth

Hogarth's classic depiction of character and caricature well illustrates the crowd of minor characters that surround protagonists in Austen's novels to offset their cognitive richness. In her works, however, these figures are intentionally caricatured by way of their attention—and their characters duly flattened—to avoid the hubbub we see in Hogarth. Instead of overwhelming the scene or its audience, her novels use minor characters to draw our focus to her heroes and heroines at the narrative center. Hogarth, *Characters and Caricaturas* (1743). The Trustees of the British Museum / Art Resource, New York.

it would take for a character's defining difference to be clear."[17] The transition toward a Romantic and Victorian system for thinking about roundness, envisioning depth as the product of quantity, is fully in motion in Austen's works. The categories that emerge in studying the history of focus, this chapter suggests, can reframe discussions of the fictional mind, providing other metaphors for the intricate variety of thoughts (and habits of thinking) modeled in narrative. If traditional models of characterization continue to use Forster's volumetrics for

measuring the fictional mind (even the term *psychological depth* equates space with capacity), analyzing characters' styles of attention reveals a broader range of traits to apply in literary criticism: cognitive endurance, capacity, and divisibility as well as quickness, flexibility, and liveliness of mind.

The Singular Importance of Inattentive Characters

> There is no surer sign in the world of a little, weak mind, than inattention.
>
> —Philip Dormer Stanhope, Earl of Chesterfield[18]

Austen's minor characters are plagued by focused blindness: we find the single-minded Lady Bertram of *Mansfield Park* (1814) "thinking more of her pug than her children";[19] in *Northanger Abbey* (1818) Mrs. Allen's all-consuming interest in muslins leads her to demonstrate "more care for the safety of her new gown than for the comfort of her protegée."[20] Even critiques of selective attention as madness from the 1780s and 1790s drew on a metaphorics that portrayed the unifocal mind as powerful. Focus, despite its associations with microscopy and visual narrowing, magnified sight; absorption, with its metaphorics of fluid expansion, still implied a capacious mind in which one idea saturates cognition; a concentrated substance, though occupying less space, is also potent with undiluted energy and power. If in works like *Caleb Williams* selective attention signals a focus that has become too strong, prone to spasming and locking on an object, in Austen single-mindedness is the mark of cognitive weakness. A character's monofocus now signifies diminished focal capacity, giving us the sense of a mind that is weak, narrow, and small—one so tiny a single idea fills it to the brim. Often the trait of seemingly distracted minor characters who leap from topic to topic, this tendency to return to a single object while remaining inattentive to all else paradoxically comes to signify short attention span. Unifocal characters, symbols of smallness, fall into cognitive ruts that evoke diminished attentional strength, narrow rather than broad interests, and a recursive flightiness of thought. Conjoined, these tics convey a lesser intelligence: the narrative signature of "a little, weak mind."[21]

Mr. Hurst: The Limited Capacity of the Undivided Mind

Mr. Hurst, claiming a total of nine sentences in *Pride and Prejudice*, stands as a perfect and particular signifier of smallness. Introduced as Elizabeth arrives mud-splattered and flushed from her walk to Netherfield, Hurst enters alongside Darcy. The scene to follow, the first time Mr. Darcy finds his attention drawn by Lizzy, relies on Hurst's sins of monofocus. The episode's power depends on a comparison of the two: "Mr. Darcy said very little, and Mr. Hurst nothing at all. The former was divided between admiration of the brilliancy which exercise had

given to her complexion, and doubt as to the occasion's justifying her coming so far alone. The latter was thinking only of his breakfast" (70). While critics have focused on the hero's encounter with Elizabeth's brilliance, when it comes to Darcy's depth, the crucial moment is the one-liner at the end about Hurst: "The latter was thinking only of his breakfast." The hero is shown holding two concepts in mind, aesthetic appreciation and social judgment; Mr. Hurst stares at his porridge. To be a man who "thinks only of" one thing, in Austen, is to be the epitome of simplicity: cognitively not only flat but thin. If character was often discussed as something drawn in lines, or "strokes," Hurst gets just one—a single thread of mind.[22] The scene's barely restrained rudeness, unifocal caricature, and banal object, is the narrative machinery that sets into motion the rising complexity of Darcy's mind. What's most important is not the nature of the contradictory emotions occupying the hero's attention but that his mind is divided at all.[23]

When not eating, Mr. Hurst's object of focus is cards, leaving him humorously insensible to all else. Bored or incensed by situations that deprive him of his beloved pastime, he is unable to endure diversion; when the heroine divides attention between banter and a round of loo, Hurst puts an end to it, "call[ing] them to order, with bitter complaints of their inattention to what was going forward" (77). Despite his supposed regulation of rudeness, Hurst alone breaks Chesterfield's injunction prescribing quickness of attention to "every thing at once": "Mr. Hurst, by whom Elizabeth sat, he was an indolent man, who lived only to eat, drink, and play at cards, who, when he found her prefer a plain dish to a ragout, had nothing to say to her" (72). All alternate forms of amusement and conversation lead to mental nothings: "Mr. Hurst reminded his sister-in-law of the card-table—but in vain. . . . She assured him that no one intended to play, and the silence of the whole party on the subject, seemed to justify her. Mr. Hurst had therefore nothing to do, but to stretch himself on one of the sophas and go to sleep" (90). This passage summarizes Hurst's role: to be a character who, robbed of his object, has nothing to do but nap. Though inactivity does little to advance plot, putting an inattentive character to sleep does much for characterization; his narrowness illuminates the breadth of other minds. Quintessentially two-dimensional, Hurst has the complexity of an on-off switch.

His unifocal mind demonstrates the importance of attentional distribution; in the scene to follow, we find Hurst either engaged in a card game (here, piquet) or napping as Elizabeth divides attention between needlework and social observation:

> The loo table, however, did not appear. . . . Mr. Hurst and Mr. Bingley were at piquet. . . . Elizabeth took up some needlework, and was sufficiently amused in attending to what passed between Darcy and his companion. (83)

> Mr. Hurst . . . stretch[ed] himself on one of the sophas. . . . Darcy took up a book; Miss Bingley did the same; and Mrs. Hurst, principally occupied in playing with her bracelets and rings, joined now and then in her brother's conversation with Miss Bennet. Miss Bingley's attention was quite as much engaged in watching Mr. Darcy's progress through *his* book, as in reading her own. (90)

George Butte and Lisa Zunshine argue that Austen describes characters' "observation of observations" to model an innovative "layering of human consciousness."[24] The structure for building cognitive richness in her novels relies in particular on layers of *attention*. While Hurst is occupied by his game, the heroine (still at the needle) notes each character's object of concentration, "attend[s] to what passed between Darcy and his companion," and also draws amused conclusions about their personalities. These layers build as Hurst sleeps. Sewing a chapter later, the heroine takes in that (1) Darcy is reading; (2) Miss Bingley is *not* reading; (3) Mrs. Hurst is "occupied" playing with her jewelry; (4) Mr. Bingley's attentions to her sister continue; and (5) Miss Bingley is as "much engaged in watching" Darcy's progress through *his* book as in "reading her own." We often take this kind of simultaneous attention—sewing and social observation—for granted. Yet these acts of divided focus showcase Elizabeth's vibrancy when set against a sleeping Hurst, comatose for want of cards.

Mrs. Jenkinson: Narrow Bandwidth and the Creation of Depth

This staging of monofocus to offset divided consciousness achieves its most thorough (i.e., limiting) representation in Mrs. Jenkinson, whose name appears in all of twelve sentences in the novel. A governess who thinks and speaks only of Miss Anne de Bourgh (her ward), Mrs. Jenkinson's debut, in a subordinate clause at Rosings, translates her preoccupation as narrowness; it delimits her cognitive capacities through dinner, their postprandial conversation, and the novel as a whole. Her unifocal mind cannot accommodate more than one thread:

> Mrs. Jenkinson . . . was entirely engaged in listening to what [Miss Anne] said, and placing a screen in the proper direction before her eyes. (188)

> Mrs. Jenkinson was chiefly employed in watching how little Miss de Bourgh ate, pressing her to try some other dish, and fearing she was indisposed. (189)

> When . . . tea was over, the card tables were placed. . . . Their table was superlatively stupid. Scarcely a syllable was uttered that did not relate to the game, except when Mrs. Jenkinson expressed her fears of Miss de Bourgh's being too hot or too cold, or having too much or too little light. (192)[25]

A half century earlier, Andrew Baxter's *An Enquiry into the Nature of the Human Soul* (1733) blamed such conversational difficulties on the limits of human con-

centration: "A man may sit in a full company at table, and neither hear nor see what is done round him. . . . It happens entirely from the simplicity of the attention, . . . which cannot apply intensely to more things at once."[26] By the time we reach Austen, monofocus instead marks contagious stupor, confining minor figures to simplicity to frame others' diversity and intelligence. With this contrast, novels could begin to embed a multifocal register of cognitive-narrative dimensionality.

In this comparative poetics of attention and character, placing Elizabeth next to a woman whose concentration is isolated to Anne's quantity of heat, food, and light frames the heroine's skill in dividing attention across topics and senses. Mrs. Jenkinson sets up one of the novel's portrayals of cross-modal attention: Elizabeth's performance on Lady Catherine's pianoforte. At the keyboard, the heroine smoothly divides her attention among multiple tasks, managing accumulating diversions without interruption: "[S]he sat down directly to the instrument. . . . Lady Catherine listened to half a song, and then talked, as before, to her other nephew; till the latter walked away from her, and moving with his usual deliberation towards the piano forte, stationed himself so as to command a full view of the fair performer's countenance. Elizabeth saw what he was doing, and at the first convenient pause, turned to him with an arch smile" (198). As Austen's description reminds us, playing piano is a particularly complicated cognitive act that demands multilayered divisions of visual, aural, and kinetic attention. One must divide focus between the left and right hands; between reading the score and feeling the keys beneath one's fingers; between drawing out the melody and keeping the accompaniment steady; between the sound of the current passage and the notes just ahead—and even this leaves out meter and rhythm. According to Charles Dibdin, popular British composer of the late eighteenth century, the teaching and learning of these skills was a purportedly easy mathematical enterprise:

> [I]t consists of nothing more than learning the gamut—the names, lengths, divisions, and measure of the notes—distinctions of all the major and minor keys—the situations of the semitones, and the doctrine of using the sharp seventh to modulate into the fifth of the key, and the flat seventh to return to the original key. These, with all colateral matters, are nothing like so difficult as the first four rules of arithmetic, with the fractions relative to them; . . . upon the same principle that Addition, Subtraction, Multiplication, and Division comprehend the whole study of figures, so do these rules in music comprehend the whole system of harmony; and all there is more to be done is, to blend, separate, diversify, and in short, use them in every possible point of view.[27]

Despite the obvious challenges of mastering near-infinite musical permutations in practice, the cross-modal attention of performance (integrating sight-

reading, rhythmic variation, melodic phrasing, and expression) becomes easier for even the middling pianist. As Locke noted, habit could render performance automatic, reducing cognitive load to the point where one could think of other things: "A Musician used to any Tune will find that let it but once begin in his Head, the *Ideas* of the several Notes of it will follow one another orderly in his Understanding without any care or attention, as regularly as his Fingers move orderly over the Keys of the Organ to play out the Tune he has begun, though his unattentive Thoughts be elsewhere wandering."[28] Work on multitasking in music cognition, particularly studies of expert performers, supports the idea that musicians can divide attention with increasing ease over time, even managing joint auditory processing with practice. A behavioral study of divided attention by Allport and Reynolds (1972), frequently invoked to refute single-channel models of focus, uses expert pianists' success in sustaining musical performance while shadowing (i.e., repeating) spoken conversation to argue for parallel processing.[29]

As Austen reminds us, however, Elizabeth is *not* a fantastic player and "would not take the trouble of practising"; her fingers, she admits, do not fly "over this instrument in the masterly manner which I see so many women's do," making such divisions far more difficult (199). Despite this disadvantage, Elizabeth plays amid increasing distraction, tuning out the entry of Lady Catherine's (presumably loud) voice and remaining unflappable as Darcy makes his confident (presumably imposing) move into her visual foreground. "Generally speaking," Ward notes, "when people try to combine two tasks they are worse at performing them together than when they perform them alone," a phenomenon cognitive scientists call the "dual task deficit."[30] This deficit, never realized in Austen's narrative, illustrates cognitive surplus. Without breaking tempo, the heroine continues to play, notes Darcy's approach, plans a witty response, finds a place to pause, and delivers her line. Appropriately, the subject Elizabeth banters about with Darcy is attention: "You mean to frighten me, Mr. Darcy, by coming in all this state to hear me? But I will not be alarmed" (198). He will not succeed, that is, in distracting her.

Her quip provides a witty summary of the diversions to come. In the initial scene, listening to her own piece and to Lady Catherine's conversation showed the heroine to be adept at joint auditory processing, a cognitive situation known to be particularly taxing. Concurrent tasks cointerfere more, studies suggest, "if they use the same modality, require similar kinds of processing (e.g. two memory tasks), use the same internal codes (e.g. verbal or visual), or require similar types of response."[31] In a heroic feat of parallel processing, the heroine combines auditory and visual tasks (playing while noting Darcy's change of place), performs while determining what to say in response (combining cross-modal tasks, auditory processing and speech planning) and finds the right timing in the piece

for it (cross-modal, auditory, and rhythmic forecasting).[32] Speaking simply of an audience's ability to *listen* to a piece, German critic Wilhelm Heinrich Wackenroder describes sustained musical attention as so demanding it required the absolute exclusion of distractors, as well as a strict time limit. Even then, "participatory" attention wasn't imagined to last long: "[T]he most attentive observation of the notes and their progressions . . . [require] distancing and withdrawal from every disturbing thought and from all extraneous sensory impressions. . . . [This] is associated with a certain strain, which one cannot endure for too long. . . . One is capable of perceiving music in a participatory manner for only an hour at most."[33] Elizabeth's capacious mind, by contrast, engages the extraneous; it endures without withdrawing.

Entering the formidable estate and hierarchies governing attentional distribution at Rosings, Elizabeth remains unfazed. Yet when Lady Catherine's barb regarding her lack of practice fails to pierce composure, the narrative stakes rise.[34] After the heroine's musical pause, Lady de Bourgh takes up the role of auditory distractor, also assuming her nephew's intimidating place in the visual foreground. Diversions triple in power and number:

> Here they were interrupted by Lady Catherine, who called out to know what they were talking of. Elizabeth immediately began playing again. Lady Catherine approached, and, after listening for a few minutes, said to Darcy,
>
> "Miss Bennet would not play at all amiss if she practised more, and could have the advantage of a London master. She has a very good notion of fingering, though her taste is not equal to Anne's. . . ."
>
> Elizabeth looked at Darcy to see how cordially he assented to his cousin's praise; but neither at that moment nor at any other could she discern any symptom of love. (200)

Just when we think attention can be divided no further (at least not without musical catastrophe), Lady Catherine's praise of her daughter's taste produces a final round of multifocal thought: Elizabeth observes Darcy, diagnoses no "symptom[s] of love" for Anne, and assesses Miss Bingley's chances of marrying him. Against a Mrs. Jenkinson, whose mind can move between modalities (Anne's food, heat, light) yet remains unable to multitask or speak intelligently to others, we feel the strength of a capacious, multisensory mind.

Lydia and Miss Bingley: Caricaturing Cognitive Vacancy

Capacity is one thing, but how does an author convince readers they are engaging a character of substance—a protagonist able to support a reader's attention the length of a novel? For this, we need more than breadth (illuminated by a narrow Hurst), depth (revealed against an Anne-focused Mrs. Jenkinson), or even scenes of multitasking at the pianoforte. To give protagonists weight, a

novel needs higher-order minor characters and attentional contrasts. With stylistic prescience, Austen predicts a novelistic move that will become commonplace for Victorian writers; her novels' minor characters frequently demonstrate what Nicholas Dames claims will become a nineteenth-century commonplace: "single-minded, even anesthetic, focus [that shades] into . . . aphasic stupidity."[35] Lydia Bennet and Miss Caroline Bingley highlight Austen's translation of three additional qualities of focus—the significance of one's object of attention, the difficulty of attentional tasks, and their average duration—into narrative counterbalances for the hero and heroine's density and cognitive strength.

Lydia, incessantly focused on frivolities such as soldiers, hats, and balls, cannot take in anything of import or keep her "giddy" thoughts steady long. Elizabeth enumerates the objects that fill her sister's brain: "Since the——shire were first quartered in Meryton, nothing but love, flirtation, and officers, have been in her head" (292). A symbol of fullness and dearth, the youngest Bennet sister is at once the novel's most single-minded character (addicted to flirting with the regiment), the most vacant (empty-headed), and the most distracted (diverted by everything from ribbons to lottery tickets). Miss Caroline Bingley, the heroine's rival, demonstrates superior attentional capacities, including an acute awareness of social protocol and the Bennets' lapses of it; yet she too demonstrates an inability to focus on anything besides men, especially in the presence of Darcy. Together, Lydia and Miss Bingley provide a vision of male-oriented attention that doubles as a satiric portrait of cognitive vacancy whose pairing emphasizes the strength and substance of Elizabeth's and Darcy's minds.

Before attention span came to represent the length of time one could focus, it connoted breadth: the number of objects one could take in at once.[36] In Lydia, the two are connected by virtue of their relative lack, creating the impression of an officer-full yet empty head. A girl who "seldom listened to any body for more than half a minute," Lydia is explicitly declared to have a "vacant" mind (238, 66). The Bennets' youngest is "particularly frequent in [her] attentions" to the regiment; the need to continuously fill her otherwise empty mind renders: "a walk to Meryton . . . necessary to amuse [her] morning hours and furnish conversation for the evening. . . . While there was an officer in Meryton, they would flirt with him; and while Meryton was within a walk of Longbourn, they would be going there for ever" (66, 231). Durative attention to anything but officers is an impossibility. When Mr. Collins forswears the family novel for Dr. Fordyce's *Sermons*, Lydia interrupts before he has read three pages:

> Lydia gaped as he opened the volume, and before he had, with very monotonous solemnity, read three pages, she interrupted him with,
>
> "Do you know, mama, that my uncle Philips talks of turning away Richard, and if he does, Colonel Forster will hire him. My aunt told me so herself on Sat-

urday. I shall walk to Meryton to-morrow to hear more about it, and to ask when Mr. Denny comes back from town." (103)

Collins may be a pretentious bore, but the youngest Bennet sister is the butt of satire. Her inane chatter—captured in an uncharacteristically loose prose—anticipates that of *Emma*'s garrulous Miss Bates, similarly barred from cognitive density. According to D. A. Miller, the loquacity surrounding light minds leads to a lighter reading style: "The recorder of Emma's ample inner life categorically refuses to Miss Bates any of the reserve that is its precondition. . . . The unendurable garrulity typical of these characters, by stimulating our impatience to *get on with the story*, confirms our assent to the old maid's representational limits; indeed, as we ruthlessly skim their speeches, intolerable blemishes on a prose to which we otherwise gladly grant our undivided attention, we take the enforcement of these limits into our own hands."[37] Similarly, Austen's departure from stylistic crispness around Lydia signals a refusal to grant this character cognitive reserves—a choice that highlights Elizabeth's mental weight, endurance, and strength. Yet it is wrong to think this stylistic disparity (and the division of mental resources it reflects) is less worthy of our attention and notice. Austen's readers are to show themselves capable, not of "undivided attention," but of cognitive distribution—able to take in diverse styles and styles of mind. We find our best model for this allocation in Mr. Bennet. His wry paternal observations exemplify the power of comparative weighting in a divided mind, counterpoised by his wife's tendency to lump characters together.[38] Noting the unbroken thread of attention in Lydia and Kitty's conversation ("They could talk of nothing but officers" [66]), he immediately diagnoses their problem and passes judgment. If Hurst's "to think only" stands in for single-mindedness, to "talk of nothing but" the banal signifies the ephemeral attention of the silly, the frivolous, and the cognitively light:

After listening one morning to their effusions . . . , Mr. Bennet coolly observed,

"From all that I can collect by your manner of talking, you must be two of the silliest girls in the country. I have suspected it some time, but I am now convinced." . . . .

"I am astonished, my dear," said Mrs. Bennet, "that you should be so ready to think your own children silly. . . ."

"If my children are silly I must hope to be always sensible of it."

"Yes—but as it happens, they are all of them very clever."

"This is the only point, I flatter myself, on which we do not agree. I had hoped that our sentiments coincided in every particular, but I must so far differ from you as to think our two youngest daughters uncommonly foolish." (66–67)

As Miss Bingley's attention span shows, even a woman of wealth, intelligence, and wit is at risk. Our first glimpse of Caroline's foreshortened concentration

appears at Netherfield. The episode's comedy relies on the ability of a wealthy bachelor to interrupt (and reveal the superficial substructure of) Miss Caroline's mind. Taking up a book, her focus is repeatedly diverted:

> Miss Bingley's attention was quite as much engaged in watching Mr. Darcy's progress through *his* book, as in reading her own; and she was perpetually either making some inquiry, or looking at his page. . . . At length, quite exhausted by the attempt to be amused with her own book, which she had only chosen because it was the second volume of his, she gave a great yawn and said, "How pleasant it is to spend an evening in this way! I declare after all there is no enjoyment like reading! How much sooner one tires of any thing than of a book!—When I have a house of my own, I shall be miserable if I have not an excellent library."
>
> No one made any reply. She then yawned again, threw aside her book, and cast her eyes round the room in quest for some amusement. (90)

Easily fatigued by light multitasking (Darcy and Darcy's book), Miss Bingley's yawn gives both the lie and the narrative power to the ironic "at length" that brackets her reading's swift commencement and its equally hasty conclusion; such attention delimits her powers of mind. Darcy reveals a focal peculiarity that will repeatedly block Miss Bingley's normal intelligence to the heroine's benefit. Against a woman who can talk of large libraries but can't get through a short passage, even Elizabeth's briefest literary engagements can signal durative attention.

Austen had been at work on such comparative descriptions of reading since she was sixteen. As early as *Catharine, or the Bower* (1792), she juxtaposes her heroine, Catharine, with the boy-crazy Camilla Stanley, who complains of her friend's favorite book: it "is *so long*."[39] Their argument over the merits of two imaginary works, the voluminous *Ethelinde* and the shorter *Emmeline*, begins with the heroine's defense of lengthy novels and ends when Camilla's attention rebounds to courtship:

> "That is a very common Objection, I believe," said Kitty, "but for my own part, if a book is well written, I always find it too short."
>
> "So do I, only I get tired of it before it is finished."
>
> "But did not you find the story of Ethelinde very interesting? And the Descriptions of Grasmere, are not the[y] Beautiful?"
>
> "Oh! I missed them all, because I was in such a hurry to know the end of it."—Then from an easy transition [Camilla] added, "We are going to the Lakes . . . , and I am quite Mad with Joy; Sir Henry Devereux has promised to go."[40]

Modeling the distinctions that demarcated what Coleridge called "classes of readers" in the Romantic period, the bookish Catharine profits from Miss Stanley's disinterest by rising in the ranks of taste. Miss Bingley's attention to Darcy

is an updated emblem of the woman who prefers beaux to books. Her advertisements of interest ("How much sooner one tires of any thing than of a book!") offset not only Elizabeth's strengths as a reader but also Darcy's focus as a writer. A master of "long letters" and vocabulary, the hero composes at length, writing in syntactically dense, semantically complex phrases. To borrow a line from his friend Charles, "He studies too much for words of four syllables" (84).

In seventeenth-century France, Nicolas Malebranche urged readers to devote "intense practice and effort" to developing their capacity to sustain attention—what he called "'the strength of the mind' (*la force de l'esprit*)."[41] Both the hero and heroine's attention embody it. Elizabeth's focused musical performance at Rosings continues even longer than the original scene; the heroine endures Lady Catherine's "continued . . . remarks" through the evening, "remain[ing] at the instrument till her ladyship's carriage was ready to take them all home" (200). While Elizabeth multitasks at Netherfield, Darcy's focus must survive a similar barrage from Miss Caroline, "repeatedly calling off his attention" from a letter to Georgiana:

> Elizabeth took up some needlework, and was sufficiently amused in attending to what passed. . . . The perpetual commendations of the lady either on his hand-writing, or on the evenness of his lines, or on the length of his letter, with the perfect unconcern with which her praises were received, formed a curious dialogue. . . .
>
> "How delighted Miss Darcy will be to receive such a letter!"
>
> He made no answer.
>
> "You write uncommonly fast."
>
> "You are mistaken. I write rather slowly."
>
> "How many letters you must have occasion to write in the course of a year! Letters of business too! How odious I should think them!"
>
> "It is fortunate, then, that they fall to my lot instead of yours." . . . .
>
> "How can you contrive to write so even?"
>
> He was silent. (83–84)

The dialogue's pace outlines Miss Bingley's inability to concentrate on anything but Darcy and the hero's uninterrupted attention to his sister, a focus that illustrates his ability to divide concentration. From the placement and narration of Darcy's pauses, we sense that he takes in (and judges) Caroline's banalities while writing; rather than obliviousness, his is a purposive silence—as powerful a commentary as his conversational partner's persistent speech acts.

Such intersections of narratology and cognitive studies raise a question of ongoing interest for literary studies: how does a novel—a bound assemblage of ink on paper—produce the illusion of a character (and a mind) worth engaging with at all? Or, as Vermeule puts it in *Why Do We Care about Literary*

Characters?, "What, then, tempts us to spend mental energy on people we have never met and will never meet, on people whom we know to be fictional?"[42] Hurst and Jenkinson yield only a two- or three-dimensional mind in a protagonist by way of comparison. And, as we might imagine, it takes more than two minor figures—and the twenty-one sentences they occupy in a novel of over five thousand—to produce the sense of an intricate fictional mind. Yet in Lydia's and Caroline's cases, it is not simply about the space they occupy. Their short attention spans and strangely vacant modes of cognition, more powerful than their cumulative narrative presence, add a fourth dimension, extending the dimensionality and substance of Elizabeth's and Darcy's divided attention over time.

Foreshortened by a combination of boredom, disinterest, and attentional displacement, Miss Caroline's inability to occupy herself "at length" also reveals an intelligence rendered vacant by *horror vacui*. As Blaise Pascal wrote in his *Pensées*, "Sometimes, when I set to thinking about the various . . . quarrels and passions [of men], I have often said that the sole cause of man's unhappiness is that he does not know how to stay quietly in his room."[43] The quick rotations and witty turns in such a mind are revealed to be a thin disguise for an empty head. Consumed by the veneer of accomplishment and social climbing, Caroline's words and actions fail to carry weight. An alliance with Elizabeth, her invitation "to take a turn about the room," is revealed to be a bid for male attention:

> Miss Bingley . . . got up and walked about the room. Her figure was elegant, and she walked well;—but Darcy, at whom it was all aimed, was still inflexibly studious. In the desperation of her feelings she resolved on one effort more; and turning to Elizabeth, said,
>
> "Miss Eliza Bennet, let me persuade you to follow my example, and take a turn about the room.—I assure you it is very refreshing after sitting so long in one attitude."
>
> Elizabeth was surprised, but agreed . . . immediately. Miss Bingley succeeded no less in the real object of her civility; Mr. Darcy looked up. He was as much awake to the novelty of attention in that quarter as Elizabeth herself could be, and unconsciously closed his book. (91)

Against these attention-seeking gestures, Elizabeth's teasing of Darcy bespeaks the power and sharpness of a vibrant mind. Chapters 10 and 11, devoted to testing characters' attentional endurance, conclude with a fittingly long round of repartee between hero and heroine. The exchange, depriving Caroline of even the illusion of Darcy's notice, leaves Miss Bingley's mental faculties exhausted and Darcy alarmed to find his focus matched. Appropriately enough, Hurst wakes:

> "Do let us have a little music,"—cried Miss Bingley, tired of a conversation in which she had no share.—"Louisa, you will not mind my waking Mr. Hurst."

Her sister had not the smallest objection, and the piano forte was opened, and Darcy, after a few moments recollection, was not sorry for it. He began to feel the danger of paying Elizabeth too much attention. (93)

The Dangers of Too Much Attention

> Genius is the expansiveness of the intellect, the force of the imagination and the activity of the soul . . . struck by all . . . he rapidly observes a vastness and a multitude of beings. . . . [Yet] it has neither the disposition nor the ability to follow its ideas; . . . [and] it is rare that it follows the chain of consequences.
>
> —*Jean-François de Saint-Lambert*[44]

"Too much attention," in Austen, is indeed a danger. Focus still evokes cognitive fortitude; yet here, as in the Gothic, excessive attention risks mental stasis. Darcy's "inflexibly studious" focus leaves him on the edge of rigidity, deprived of the animated flights Jean-François de Saint-Lambert associated with a vibrant mind. One unusually heated debate between Darcy and Charles over the value of spontaneity in writing underlines this turn toward distraction in Austen's character system. Like the novel, the narrative opposition of two men at Netherfield proceeds toward a model that values quickness and cognitive flexibility. The conversation ends with Elizabeth praising Charles's more pliable temper. Yet it begins with Darcy; the hero defines his concentration as proper focal care:

> "Oh!" cried Miss Bingley, "Charles writes in the most careless way imaginable. He leaves out half his words, and blots the rest."
>
> "My ideas flow so rapidly that I have not time to express them—by which means my letters sometimes convey no ideas at all to my correspondents." . . . .
>
> . . . "[Yet] you are really proud of your defects in writing [said Darcy], because you consider them as proceeding from a rapidity of thought and carelessness of execution, which if not estimable, you think at least highly interesting. The power of doing any thing with quickness is always much prized by the possessor, and often without any attention to the imperfection of the performance. . . ." . . . .
>
> "You have only proved by this," cried Elizabeth, "that Mr. Bingley did not do justice to his own disposition. You have shown him off now much more than he did himself." (84–85)

Elizabeth's defense of Bingley is supported by a reversal of Austen's comparative character system. Darcy's unbending focus (and his condemnation of rapidity) offsets Charles's imperfections as likeable, illuminating the sophistication of a minor character far better than the novel's dialogue could alone. Bingley, in a rare moment of bravado, joins their argument about one man's tendency to "yield" to another. In a metacommentary on the novel's comparative structure,

he teasingly urges them to add each man's physical size (and the rhetorical advantage this grants the larger) to the terms of debate:

> "By all means," cried Bingley; "Let us hear all the particulars, not forgetting their comparative height and size; for that will have more weight in the argument, Miss Bennet, than you may be aware of. I assure you that if Darcy were not such a great tall fellow, in comparison with myself, I should not pay him half so much deference. I declare I do not know a more awful object than Darcy, on particular occasions, and in particular places; at his own house especially, and of a Sunday evening when he has nothing to do." (86)

As Puckett reminds us in *Bad Form*, "thinness, taken seriously as a physical metaphor, at once diminishes and relies on the idea of a character's interiority."[45] In terms of size and strength, Darcy may be the victor—in mind as well as in body—but as Charles recognizes, the space a character takes up is far from a register of narrative worth. In a marked twist, a minor character sends up the limitations of the narrative-cognitive system that confines and diminishes him, revealing the simplicity of a structure that renders him thin (a cognitive lightweight) by registering the very spontaneity, openness, and quickness this system ignores. Setting up and claiming traits the novel will flesh out in Elizabeth, Charles recasts Darcy's firmness as rigidity. In Bingley's sketch, the hero, alone and bored on a Sunday, is no longer the formidable writer of long letters, but a Romantic caricature: without an object, he becomes the inflexible figure of the Gothic sublime.

If the protagonist's excessive focus risks rendering characters rigid, so too did the strategy of using lines of attention to construct cognitive richness. In *Tristram Shandy*, Sterne speaks of the aesthetic subtlety—the "insensible more or less"—required to sketch a full, complex character: "Just heaven! how does the *Poco più* and the *Poco meno* of the *Italian* artists;——the insensible, more or less, determine the precise line of beauty in the sentence, as well as in the statue! How do the slight touches of the chisel, the pencil, the pen, the fiddle-stick, *et caetera*,——give the true swell, which gives the true pleasure!"[46] To avoid drawing "stick figures," a writer needed more than narrative tools to portray a mind's breadth, capacity, and substance—more than lines of attention. "The human mind," Uri Margolin reminds us, is "essentially dynamic," the intersection of diverse "psychological states, episodes, events, activities, and processes."[47] To capture this intricacy, the novel breaks from the metaphorics of lines, layers, and capacity—the volumetrics of the flat and the round—to fashion a new kind of dimensionality: dynamism and vibrancy, or what Austen called "liveliness of mind." This crafting of quickness and adaptability relies on characters able to be distracted, a narrative technique for evoking the mobility—the "*Poco più* and

the *Poco meno*" of the interrupted, wandering mind—that can convey a fluid, protean intelligence.

Distraction as Liveliness of Mind

In James Austen-Leigh's biography of his aunt, we find her writing amid distraction: "[M]ost of the work [was] done in the general sitting-room, subject to all kinds of casual interruptions. . . . She wrote upon small sheets of paper which could easily be put away, or covered with a piece of blotting paper. There was, between the front door and the offices, a swing door which creaked when it was opened; but she objected to having this little inconvenience remedied, because it gave her notice when anyone was coming."[48] Interruptions were inevitable. Yet according to her nephew, Austen's most productive writing occurred, not amid "the quiet life . . . at Bath and Southampton [with] abundant leisure for composition," but in the busier Chawton. Austen-Leigh weaves distracting characters—particularly, chatterboxes like Mrs. Allen—into the story of his aunt's life and writing:

> She was not . . . troubled with companions like her own Mrs. Allen in "Northanger Abbey," whose "vacancy of mind and incapacity for thinking were such that, as she never talked a great deal, so she could never be entirely silent; and therefore, while she sat at work, if she lost her needle, or broke her thread, or saw a speck of dirt on her gown, she must observe it, whether there were any one at leisure to answer her or not." . . . [Yet] I have no doubt that I, and my sisters and cousins . . . frequently disturbed this mystic process, without having any idea of the mischief that we were doing.[49]

Austen's heroines are similarly distracted and interrupted. Despite drawing up "a great many lists . . . of books that she meant to read regularly through," Emma is declared by Mr. Knightley to be incapable of consistent attention: "I have done with expecting any course of steady reading from Emma."[50] Though obsessed with Gothic fiction, Catherine Moreland of *Northanger Abbey* is rarely seen reading and is described by her mother as a "little shatter-brained creature."[51] Even Elizabeth Bennet reads only briefly at Netherfield before her attention turns to other amusements. With definitions of genius like those of Jean-François de Saint-Lambert in circulation—expansiveness marked by vibrant activity of the soul—Miss Bingley's insinuation that the heroine reads to the exclusion of other delights must backfire. Caroline's backhanded compliment describing her as "a great reader, [with] no pleasure in any thing else" yields this telling retort: "I am *not* a great reader, and I have pleasure in many things" (74).

Mary Bennet and Lady Catherine, two characters who never interact, serve as counteremblems of cognitive inflexibility. If Mary embodies the problem of hyper-

focus on one thing, Lady Catherine symbolizes the problem of a vigilant attention to many things. As Catherine Gallagher notes, "flexible mental states were the sine qua non of modern subjectivity" in the eighteenth-century novel.[52] Elizabeth's distraction emerges as its signature against the stasis of their more frozen modes of thought. Unlike Hurst and Jenkinson, these fictional minds are locked not to a single object but to a single mode of durative attention. The deep attention of a Mary reveals a capacious but rote knowledge whose elements are unable to be moved or recombined; the unremitting vigilance of a Catherine unveils a mind trapped by its inability to modulate alertness, particularly that paid to aristocratic hierarchies. In both characters, unbending focus illuminates a fictional mind unable to wander to new objects or accommodate new systems, invulnerable to deep learning or change.

If Diderot's definition of distraction articulated a cultural reorganization around attention, Austen's *Pride and Prejudice* is its narrative realization. The novel takes up the idea that distraction contains a kernel of creative energy and turns distraction into a literary device for simulating the complex vibrancy of Elizabeth's inner life. Austen's novels draw on eighteenth-century theories of intelligence to transform Diderot's distraction into a structure of characterization. This revaluation revolved around the opposition of two cognitive types: what Saint-Lambert called the "man of genius" and the "man of knowledge," or what psychologists today might term "fluid" and "crystallized" intelligence. Fluid intelligence is so named, according to Raymond Cattell, the man who coined it, because it possesses "the 'fluid' quality of being directable to almost any problem"; crystallized intelligence, by contrast, bespeaks the depth and breadth of one's education in particular areas of expertise, such as vocabulary or mathematics.[53] Contrasted against characters who possess extensive crystallized knowledge (mnemonic and social) but remain locked in a single attentional mode, Elizabeth's mind is revealed to be not only capacious but mobile.[54] Against their rigid attention, the heroine's distraction becomes the sign of fluid intelligence, a final stroke in the rendering of dynamic cognitive richness.

Mary Bennet: Hyperfocus and Cognitive Immobility

> Within philosophy where one must perhaps be particularly attentive, there is a . . . reflexive habit which is hardly compatible with [the] over-heated imagination . . . which makes for *genius*; [philosophy] requires men who are capable of order and the ability to follow through with their ideas, to follow the links so as to finish. . . . Genius hastens . . . progress [by] the most felicitous yet unexpected discoveries. . . . It takes flight at a certain point and

> throws itself toward its goal. . . . [I]t is rare that it follows the chain of consequences; it is the *first strike*, to use Montagne's quote.
>
> —*Jean-François de Saint-Lambert*[55]

Deprived of the ability to interrupt concentration, Mary Bennet is to be found in one of two positions: lost in study or at the pianoforte. When Elizabeth and Jane finally return home from Netherfield, they discover their sister where they left her: "They found Mary, as usual, deep in the study of thorough bass and human nature; and had some extracts to admire, and some new observations of thread-bare morality to listen to" (95). The novel implies that neither Mary—nor Mary's focus—have moved in the meantime; she is still reading as intently as she was when they departed a few chapters before. In Austen, such unshifting attentiveness becomes the antithesis of cognitive fluidity. The key is not just that Mary is still reading but that she is still utterly absorbed, demonstrating a rigidity that defines the flexibility of her sister's "quick pace[d]" mind—"springing . . . with impatient activity" across mud-covered fields (70).

The monotony of Mary's "as usual" holds; Austen only grants her one mode of attention throughout the novel: hyperfocus. Describing struggles with attentional shifting, neuroscientist Thomas Brown defines hyperfocus as a form of mental concentration that focuses consciousness on a narrow subject and leaves individuals "unable to stop focusing on one thing and redirect their focus to another when they need to. . . . They describe it as 'locking on' to some task, sight, or sound they are interested in while totally ignoring or losing track of everything else."[56] Fifty years prior, when traditional religious ideas about attention held sway, depicting absorption could reliably convey piety and goodness, as well as the depth of a character's mind. As Michael Fried explains, French painters of the 1760s intentionally sought to "capture" characters in visible states of heightened attention in their artworks so as "to arrive in the end at the sort of emotionally charged, highly moralized, and dramatically unified situation that alone was [thought] capable of embodying with sufficient perspicuousness the absorptive states of suspension of activity and fixing of attention that painter and critic alike regarded as paramount."[57] For absorption to carry such cultural significance, however, intense focus also needed to be *temporary*. Mary remains locked in a state of close attention. The iterative "as usual" (and the cycle of repetition it connotes) drains her focus of narrative power.

Though granted a wider range and complexity of tasks than Hurst or Jenkinson, Mary attends to all tasks in *the same way*: unremitting focus. Her engagement with reading and pianoforte, used to illustrate the heroine's depth, flattens her. Deep as Mary's absorption in philosophy and music theory may be, it is also static—as though she and her mnemonic recall have been left suspended. This clockwork diligence, the narrator implies, robs her of the ability to adjust.

Evidence of this first appears when Mr. Bennet asks Mary to comment on rules of etiquette. Inflexible-minded, she fails woefully:

> "What say you, Mary? for you are a young lady of deep reflection I know, and read great books, and make extracts."
>
> Mary wished to say something sensible, but knew not how.
>
> "While Mary is adjusting her ideas," he continued, "let us return to Mr. Bingley." (47)

The joke, which relies on the contrast between Mary's supposedly deep reflections and her shallow—in fact, absent—contribution to the conversation, is still funnier in historical context. Medieval and early modern memory theory, Mary Carruthers notes, cast memory as intrinsically dynamic. Far from encouraging rote memorization, the goal was to store information in ways that allowed one to "manipulate" it, making it "possible to bring it together or separate it in a variety of ways, to collate, classify, compose, and sort it in order to create new ideas or deconstruct old ones. . . . One accomplishment which seems always to have been greatly admired . . . was the ability to recite a text backwards as well as forwards, or to skip around in a systematic way, without becoming lost or confused."[58] Unable to keep up with the flow of dialogue, Mary cannot even move her ideas fast enough to speak. La Bruyère's *Characters* claims two problems of attention can render one a fool in conversation: "a kind of incogitancy that leads us to wander away from the subject under discussion, so as to make us ask untimely questions or return silly answers, and . . . paying too great attention to the least word said . . . to have an opportunity of showing how clever we are."[59] If Lydia embodies mind wandering, Mary figures the rigidity of attending "too much"; unable to divide attention between conversation and her thoughts, her mind cannot put its crystallized knowledge to use.

When Mary finally translates her study into everyday conversation—in response to Lydia's elopement—her comments are limited to those from "great books." A parody of Saint-Lambert's philosopher, a man "particularly attentive" to order, who can "place the microscope onto an imperceptible point [to see] the singularity of connections . . . and does not believe to have seen well unless having looked for a long time," she is similarly barred from "felicitous [or] unexpected discoveries." Unable to cobble together new thought in the face of family disaster, Mary regurgitates maxims she has picked up in her readings. In this, her longest speech of the novel, she produces four rather frozen gems of morality, commonplaces culled from her conduct books:

> "Unhappy as the event must be for Lydia, we may draw from it this useful lesson: that loss of virtue in a female is irretrievable—that one false step involves her in endless ruin—that her reputation is no less brittle than it is beautiful,—and that

she cannot be too much guarded in her behaviour towards the undeserving of the other sex."

Elizabeth lifted up her eyes in amazement, but was too much oppressed to make any reply. Mary, however, continued to console herself with such kind of moral extractions from the evil before them. (298)

Pertinent as such moral abstractions may be, the tone is clearly off. Though showcasing Mary's capacious memory, her feat emphasizes crystallized intelligence to the detriment of innovation. As Carruthers reminds us, "The proof of a good memory lies not in the simple retention and regurgitation even of large amounts of material. Rather, it is the ability to move it about instantly, directly, and securely that is admired."[60] The strangely similar rhythm of each exemplum suggests that they have been transplanted, full-fledged, from the written to the oral, unsullied by any reframing or contextual translation. The repeated cadence of each phrase ("that . . . ," "that . . . ," "that . . . ," "that . . .") makes her sound flat; anaphora evokes the unbroken meter of ideas rendered by rote. While most people naturally adjust the rhythm and tone of their own speech to match that of another speaker, the pace of Mary's conversation remains metrically unmoved.[61] Her language, like her character, is monotone, attuned to an inert set of objects—her books and the morals they contain.

Discussions in cognitive narratology have long struggled to articulate the full range of mental processing described in narrative, particularly aspects that fall outside the traditional register: inner monologue, thought report, stream of consciousness, psychonarration, free indirect discourse, and so on.[62] Alan Palmer has brought attention to the nonlinguistic elements of the fictional mind: "Language," he maintains, citing Antonio Damasio, is in the end a "translation of something else, a conversation from nonlinguistic images which stand for entities, events, relationships, and inferences. . . . [T]here must be a nonverbal self and a nonverbal knowing."[63] Amid this interest in the spoken and the unspeakable, few have recognized how narrative dialogue—not just the content of a character's speech, but the *pacing* and framing of articulated consciousness—is used to represent a distinctive style of mind. If *Tristram Shandy* uses dashes (conventionally read as conversational) to convey the idiosyncratic rhythms of scattered thought, here the focus is on dialogue and conversation itself, particularly as a tool for registering rhythmic variations in a fictional mind—or in Mary's case, the relative lack thereof. Conversational rhythms evoke cognitive patterns; if Tristram's mind falls on eccentric beats, Mary's has the constancy of a metronome.

Even the flattest heroes and heroines of the eighteenth-century novel—the speaking coins of popular it-narratives such as *Chrysal, or the Adventures of a Guinea* (1760–65)—are objects rife with character (printed or engraved) and

motion.[64] Addison and Steele's speaking twelve-penny piece, the splendid shilling from *The Lucubrations of Isaac Bickerstaff* (1712), brags it has a "wonderful Inclination to Ramble"; traveling in the circulation of economic commerce, the shilling declares its most painful moment to be falling into the clutches of a miser, who "clapped me into an Iron Chest, [with] Five Hundred more . . . who lay under the same Confinement."[65] Unlike Elizabeth, prone to "scampering about the country" (72)—or the coin, bouncing from hand to hand—Mary's focus enforces a confinement that radically delimits her range of motion. Set up only to study and be static, Mary can "never spare time" from reading, and thus cannot indulge in a jaunt or productive mental wandering:

> Lydia's intention of walking to Meryton was not forgotten; every sister except Mary agreed to go with her. (105)

> Mrs. Bennet was not in the habit of walking, Mary could never spare time, but the remaining five set off together. (364–65)

Lydia's attempt to lure her outside fails abysmally: "Far be it from me, my dear sister, to depreciate such pleasures," Mary tells her. "I confess they would have no charms for *me*. I should infinitely prefer a book" (238). Unlike the fixated characters of the Gothic, literally imprisoned, Mary's immobility has been domesticated: she simply stays home.

Mary's stasis reflects a still deeper inflexibility of mind that bars her from change. Lydia's actions, which stun and alter Elizabeth, leave Mary unmoved. When the heroine crosses the country from Pemberley to support her family, Mary and Kitty remain upstairs, too focused on daily routines to notice their older sister. Habitual self-absorption has left the two girls untouched by any reaction to the elopement: "Mary and Kitty . . . had been too busily engaged in their separate apartments, to make their appearance before. One came from her books, and the other from her toilette. The faces of both, however, were tolerably calm; and no change was visible in either" (297). A few lines later, Jane explains Mary's inertia—and why she has not asked Mary to lend a hand. The others "would have shared in every fatigue, I am sure," Jane tells Elizabeth, "but I did not think it right . . . and Mary studies so much, that her hours of repose should not be broken in on" (301). Uninterrupted, the ever-attentive Mary is left immobilized. A crystallized figure of absorption, she remains a caricature of excessive, and impoverished, attention.[66]

Lady Catherine de Bourgh: The Problem of Excessive Vigilance

> A presence of mind . . . a quality which is so necessary to those who govern [is] absolutely opposed to *genius*. . . . Men of *genius* [are] distracted by a thousand things, guessing excessively, are [ren-

> dered] shortsighted by allowing an excess of their desires and their hopes and . . . appear to be better made to overthrow and establish states . . . than to follow [an existing order]. Rules and laws . . . will only be obstacles to *genius*; it breaks them.
>
> —*Jean-François de Saint-Lambert*[67]

In an unusual moment of self-awareness, Lady Catherine describes herself as an excessively attentive woman. "Young women should always be properly guarded and attended," she says: "I am *excessively attentive* to all those things" (230; emphasis added). Not only is Lady Catherine a character with a focal surplus, she is a woman without what cognitive scientists call a *vigilance decrement*. "It is easy to be briefly attentive to a conspicuous and predictable event," Raja Parasuraman explains: "It is another matter, however, to maintain attention to some source of information to detect the occurrence of infrequent, unpredictable events over long periods of time. Tasks requiring detection of transient signals in that way are known as *vigilance* or *sustained attention tasks*. In situations such as these, the quality of attention is fragile—it declines over time—an outcome known as the *vigilance decrement*."[68] Lady Catherine's attention, neither fragile nor subtle, refuses to decline or change over time; she remains ever alert, detecting minute flaws in the world (and the people) around her. Rather than waxing and waning in its levels of focal intensity, her mind brings the same vigilance to closets as it does to aristocratic decorum; she cannot turn it off—or even turn it down.

Lady Catherine's attention is so inescapable, Austen jokes, it models the intensity and reach of a government official: "though this great lady was not in the commission of the peace for the country, she was the most active magistrate in her own parish" (194). In the *Encyclopédie* (1751), Diderot distinguishes *attention*, *exactitude*, and *vigilance*. Vigilance is a quality more befitting a captain than a magistrate:

> ATTENTION, *exactitude*, *vigilance* (*Gramm.*); tous marquent différentes manieres dont l'ame s'occupe d'un objet: rien n'échappe à l'*attention*; l'*exactitude* n'omet rien; la *vigilance* fait la sûreté. . . . Le magistrat doit être *attentif*, l'ambassadeur *exact*, le capitaine *vigilant*. Les discours des autres demandent de l'*attention*; le maniment des affaires de l'*exactitude*; l'approche du danger de la *vigilance*. Il faut écouter avec *attention*; satisfaire à sa promesse avec *exactitude*, & *veiller* à ce qui nous est confié.
>
> [Attention, exactitude, vigilance, all mark various ways in which the mind deals with an object: nothing escapes the attention; exactitude omits nothing; vigilance creates safety. . . . The magistrate must be attentive, the ambassador exact, the captain vigilant. The speeches of the others require attention; the management of business, exactitude; and the approach of danger, vigilance. It is necessary to

> listen with attention; to satisfy a promise with exactitude, and to remain vigilant over what is entrusted to us.][69]

In Austen, Lady Catherine's attention is that of a local magistrate gone wrong—indeed, gone military. As she fears a breakdown in aristocratic hierarchies, any change sparks heightened surveillance, a vigilance intended to safeguard status she possesses and power already entrusted to her.[70] Instead of modeling the magistrate's presence of mind, her interest in managing others' business expands to the hypervigilant safeguarding of the captain, alert to danger, both to himself and those below him.

Comments on Lady Catherine's vigilance become a refrain; each repetition reveals an extension of the woman's surveillance:

> Charlotte Lucas: "Lady Catherine is . . . a most attentive neighbour." (184)

> Mr. Collins: "I doubt not but you will be honoured with some portion of her notice. . . . [W]ho could have foreseen such an attention as this?" (184, 186)

> [Mr. Collins] had never in his life witnessed such behaviour in a person of rank. . . . She had been graciously pleased to approve of both [sermons] he . . . had the honour of preaching before her. She had also asked him twice to dine at Rosings, and had sent for him only the Saturday before, to make up her pool of quadrille. . . . She had even condescended [to visit him at the parsonage] where she had perfectly approved all the alterations he had been making, and had even vouchsafed to suggest some herself,—some shelves in the closets up stairs. (101)

> Lady Catherine de Bourgh's attention to his [Mr. Bennet's] wishes, and consideration for his comfort appeared *very remarkable.* (100; my emphasis)

Characters rarely get "some portion" of Lady Catherine's attention. They either get the full weight of her notice crashing in upon them or none at all. Unlike Mary, the woman is not restricted by her cognitive fixity; instead, the novel grants her an uncanny focal ventriloquism, an ability to "throw" her attention, it seems, to spaces far outside her reach. She interrupts Collins's marriage proposal to Elizabeth, for example, at Rosings. In the midst of relaying his reasons for marrying, his patroness intrudes at length:

> thirdly— . . . it is the particular advice and recommendation of the very noble lady whom I have the honour of calling patroness. Twice has she condescended to give me her opinion (unasked too!) on this subject; and it was but the very Saturday night before I left Hunsford—between our pools at quadrille, while Mrs. Jenkinson was arranging Miss de Bourgh's foot-stool, that she said, "Mr. Collins, you must marry. A clergyman like you must marry.—Chuse properly, chuse a gentlewoman for *my* sake; and for your *own*, let her be an active, useful sort of person. . . . This

> is my advice. Find such a woman as soon as you can, bring her to Hunsford, and I will visit her." (137)

Modeling an interest in minutiae derived from control-oriented narcissism (note that her "for *my* sake" comes before his own), Lady de Bourgh's attentions are so incessant and numerous that even Collins's attempt to count them seems futile. Elizabeth gives us the richest descriptions of this woman's zero-sum game of focus, delineating Lady Catherine's attention—and character—in all-or-nothing terms:

> *nothing* escaped her observation that was passing in the room. . . . She examined into their employments, looked at their work, and advised them to do it differently; found fault with the arrangement of the furniture, or detected the housemaid in negligence. (194; emphasis added)

> She inquired into Charlotte's domestic concerns familiarly and minutely, and gave her a great deal of advice as to the management of them all; told her how every thing ought to be regulated in so small a family as [hers], and instructed her as to the care of her cows and her poultry. Elizabeth found that *nothing was beneath this great Lady's attention,* which could furnish her with an occasion of dictating to others. (189; emphasis added)

If, in normal minds, the intensity of vigilance decreases over time, Lady Catherine's surveillance flatlines, extending with as much rigor into poultry as into proposals.

As Saint-Lambert reminds us, "Presence of mind . . . so necessary to those who govern [is] absolutely opposed to genius." Indeed, Lady Catherine has not been distracted by a new idea in decades. After Elizabeth's first dinner at Rosings, for instance, "little [was] to be done but to hear Lady Catherine talk, which she did without any intermission till coffee came in" (189). Incessantly demanding attention, de Bourgh's craving for focus turns Pascal's bittersweet satire on the royal relationship from diversion into biting parody: "What people want is not the easy peaceful life that allows us to think of our unhappy condition . . . but the agitation that takes our mind off it and diverts us. That is why men are so fond of hustle and bustle; . . . that is why the pleasures of solitude are so incomprehensible. . . . A king is surrounded by people whose only thought is to divert him and stop him thinking about himself, because, king though he is, he becomes unhappy as soon as he thinks about himself."[71] Advice giving—often from codes of conduct or rules of rank—leaves the woman little room for novel thoughts. Unaccustomed to listening to anyone but herself, she is rarely forced to question her elitism—much less change her style of persuasion.

Unable to force Elizabeth to confess her intentions regarding Darcy, Lady Catherine demonstrates the cognitive flexibility of a jackhammer. She cannot

adjust her habit of giving orders or speak in anything but a monologue of command: "You are to understand, Miss Bennet, that I came here with the determined resolution of carrying my purpose; nor will I be dissuaded from it. I have not been used to submit to any person's whims. I have not been in the habit of brooking disappointment" (357). When this fails, Lady Catherine can only threaten Elizabeth with attention—either its oppressive weight, or its complete withdrawal: "honour, decorum, prudence, nay, interest, forbid it. Yes, Miss Bennet, interest; for do not expect to be noticed by his family or friends, if you wilfully act against the inclinations of all. . . . Your alliance will be a disgrace; your name will never even be mentioned. . . . I take no leave of you, Miss Bennet. I send no compliments to your mother. You deserve no such attention. I am most seriously displeased" (356, 359).[72] Her intensity—an inflexible commitment to safeguarding hierarchies—renders movement outside its strict system incomprehensible. Her vigilance, a caricature of the rule-bound mind, is a narrative obstacle embodying Saint-Lambert's "rules and laws," for the genius to hurdle. A character unable to move her attention in ways any more subtle than complete saturation or utter removal, she with her all-or-nothing style of cognition is an intricate counterpoint—the other side of the same coin—to the monofocused Hurst. Able only to switch between overbearing attention and shunning (like sleeping or waking for cards), Lady Catherine's lack of incremental control illuminates the range of characterological foils and cognitive modes that frame the heroine's fine-grained psychological richness.

Elizabeth Bennet: The Benefits of Diversion

> Motion [is] his natural state. . . . [T]he genius is carried away by a torrent of ideas . . . through his new combinations; [his] creations are carried off by the crowd of his thoughts. . . . [I]n the man of genius, the imagination goes farther, [his] ideas are attached a thousand others. . . .
>
> . . . [I]t animates matter, it colors thought in the heat of enthusiasm, it has neither the disposition nor the ability to follow its ideas; it is transfigured into the persons that it transports; it has assumed their character.
>
> —*Jean-François Saint-Lambert*[73]

In his definition of genius, Saint-Lambert isolates a number of praiseworthy qualities: "expansiveness of . . . intellect," "force" and "activity" of mind, and an ability to "observe . . . a multitude of beings"; as he notes, "everything excites him." In *Pride and Prejudice*, such a description could at first be imagined to apply to Lady Catherine as easily as it could to the heroine. Elizabeth's intellectual capacity, acute social gaze, and attentional endurance comes close, when

described in these terms, to Lady Catherine de Bourgh's temperament, a woman defined by a forceful temper, an all-encompassing attention, and a tendency toward excitability. Yet, as Saint-Lambert reminds us, what separates this intellectual type from the rest is absentmindedness: he has "neither the disposition nor the ability to follow its ideas" and is "distracted by a thousand things."

Unlike Mary and Lady Catherine, Elizabeth has the capacity for distraction and thus the ability to happen upon new ideas. Playing on this notion of a generative distraction, Austen adds a touch of absentmindedness to Elizabeth's character. In the first half of the novel, her powers of observation are unparalleled; in company, the heroine listens so intently she almost lip-reads. She cannot "hear a word," for instance, when Mr. Collins introduces himself to Darcy. Yet, mortified at Mr. Collins's advances, she feels "as if [she is capable of] hearing it all": she "saw in the motion of his lips the words 'apology,' 'Hunsford,' and 'Lady Catherine de Bourgh' " (130). Yet, midnovel, her vivacity comes into the foreground as a set piece of distraction; at the novel's turning point, the narrator uses Elizabeth's diversions to cultivate a sophisticated depiction of cognitive richness. Rather than fleshing out Elizabeth's intellect via multitasking, *Pride and Prejudice* uses a tendency toward distraction—a mind that does not "follow its ideas"—to "animate" and "color" thought. In Saint-Lambert, genius accommodates itself to the temperament of the individual, "assuming their character"; in Austen's novel, the distracted mind is harnessed to create a literary structure that "transfigure[s] . . . the persons [it] transports"; it does not merely define but enlivens their character.

For Saint-Lambert as for Diderot, distraction marked a creative mind in movement, an unpredictable tempo of focus that alternates between intense concentration and sharp interruption. Austen spends a full chapter describing Elizabeth reading (and rereading) Darcy's letter in this quick-shifting mode of mind. As she moves through Darcy's missive, Elizabeth also moves through a wide variety of ideas, emotions, and intensities, conveying her energetic motion and flexibility of thought.

Darcy's epistle—a letter that his "character required . . . to be written and read"—opens in a way meant to command focus: "You must . . . pardon the freedom with which I demand your attention" (216). Despite this injunction, it receives something far from a slow, careful reading. Prone to "scampering about the country" (72), Elizabeth walks *while* she reads and reads much like she walks: "crossing field after field at a quick pace, jumping over stiles and springing over puddles with impatient activity" (70). The scene describing Elizabeth's engagement with Darcy's letter fuses this breathless quickness to lapsed attention:

> [W]ith the strongest curiosity, Elizabeth opened the letter, and, to her still increasing wonder, perceived an envelope containing two sheets of letter paper,

> written quite through, in a very close hand. . . . Pursuing her way along the lane, she then began it. (216)
>
> She read, with an eagerness which hardly left her power of comprehension, and from impatience of knowing what the next sentence might bring, was incapable of attending to the sense of the one before her eyes. (223)

Her energetic longing for the next line overpowers comprehension, the cognitive embodiment of the impatient motion Saint-Lambert associates with genius. At the end of this speed-reading, we find Elizabeth pacing, her mind so scattered she can scarcely recall how the letter ends: "when she had gone through the whole letter, though scarcely knowing any thing of the last page or two, put it hastily away, protesting that she would not regard it, that she would never look in it again. In this perturbed state of mind, with thoughts that could rest on nothing, she walked on; but it would not do; in half a minute the letter was unfolded again, and, collecting herself as well as she could, she . . . commanded herself so far as to examine the meaning of every sentence" (223–24). This mobility reflects the volatility of her emotions; able to read a conversation from across a crowded room, the heroine now needs a dose of Lady Catherine's military discipline to "command" herself to pay attention to each sentence.

Only half a minute later, she reads the letter again, this time with "somewhat clearer attention"; in this second perusal, distracting thoughts and emotions interrupt her reading. Unlike the philosopher, who follows every idea (and sentence) through a chain, Elizabeth's mind jumps. She must stop and reread after each paragraph, at times after each sentence:

> [T]he letter was unfolded again . . . she again began the mortifying perusal. (223)
>
> But when she read, and re-read . . . again was she forced to hesitate. She put down the letter. (224)
>
> Again she read on. (224)
>
> After pausing on this point a considerable while, she once more continued to read. (225)
>
> From herself to Jane—from Jane to Bingley, her thoughts . . . soon brought to her recollection that Mr. Darcy's explanation *there* had appeared very insufficient; and she read it again. (227)

Her returns to Darcy's letter are interspersed with descriptions of her distraction. Some new thought, often in free indirect discourse, necessitates another, more attentive, reading—and each close reading again scatters her thoughts. The heroine's cognitive intricacy seems to emerge from *within* the chapter's montage of leaps, stops, and starts.

A lively minded heroine, the novel imagines, must not read in a neat and orderly fashion; Elizabeth's mind, like the narrative that describes it, refuses linear development. Describing William Hazlitt's contributions to Romantic theory of mind, James Engell declares: "Each time the mind perceives something new, the process repeats. . . . In the 'pervading and elastic energy' of imagination, associations are not fixed in a sequential order."[74] The novel, like her mind—or, in fact, her mind, like the novel—seems to dart in and out, back and forth, as it throws light on a variety of fresh ideas and emotions. Switching to and fro creates an eccentric narrative rhythm, which plays out against the steady, calm rhythm of Darcy's letter, embedded in full one chapter before. As Austen seeks to capture the process of Elizabeth's mind formally within the narrative, the structure of the novel takes on the tempo of Elizabeth's liveliness.

Such restlessness may keep Elizabeth from fully absorbing Darcy's letter on first read, but her distraction also creates what Mary's cannot: a burst of new ideas. As she paces, her mind churns, giving way to and producing "variety of thought" (228). Her memory, as sharp for conversation as Mary's is for quotes, repeatedly calls up episodes for comparison and fluidly recombines them:

> [When] she again began the mortifying perusal of all that related to Wickham, [she found the] account of his connection with the Pemberley family was exactly what he had related himself. (224)

> She perfectly remembered every thing that had passed in conversation between Wickham and herself, in their first evening at Mr. Philips's. Many of his expressions were still fresh in her memory. She was *now* struck with the impropriety of such communications to a stranger, and wondered it had escaped her before. (225)

> She remembered that . . . She remembered also . . . How differently did every thing now appear in which he was concerned! . . . She grew absolutely ashamed of herself.—Of neither Darcy nor Wickham could she think, without feeling that she had been blind, partial, prejudiced, absurd. " . . . Till this moment, I never knew myself." (225–27)

As she encounters the letter, each reading yields a memory—and revision—of the past. In this recombination, her leaps of judgment are a mixture of insight and error. If genius, according to Saint-Lambert, strikes "the most felicitous yet unexpected discoveries," it also "frequently sows brilliant errors,"—in no small part because the mind "takes flight . . . and throws itself toward its goal." Yet it is in the distracted, often errant, spaces between attentive rereadings that Elizabeth finally realizes that "Mr. Darcy's conduct . . . was capable of a turn which must make him entirely blameless throughout the whole" (224). These so-called mistakes allow for the production of new, disordered thoughts, translating the heroine's distraction into a narrative vehicle for deep change. Only

after her distracted reading does Elizabeth, previously declaring Darcy the "last man in the world whom I could ever be prevailed on to marry," undergo "so material a change" that her sentiments become precisely the opposite (214, 366). The halts and leaps, slants and errors of the heroine's mind as she reads *fuel* the novel's double transformation: her acknowledgment of changed emotions toward Darcy and the self-recognition of unseen prejudice. Playing on the idea of distraction as transformation, the chapter ends with the heroine's mind adrift: distraction prompts in her an awakening of ideas: "[Elizabeth] wander[ed] along the lane for two hours, giving way to every variety of thought; re-considering events, determining probabilities, and reconciling herself as well as she could, to a change so sudden and so important" (227–28).

Characterizing Reading: Maps of Distraction and Interest

Reading, Wolfgang Iser reminds us, is inherently an act of divided attention, asking us to integrate "a variety of perspectives [which] provide access to what the reader is meant to visualize."[75] Our picture of narrative events and characters emerges from our own fluid movements of attention and memory, focusing in on a passage after skimming through others, pausing to reflect, revising our sense of past pages based on current context. Just the act of word recognition requires massive cognitive mobility and parallel processing. As Stanislas Dehaene explains in *Reading in the Brain*,

> Only the center of the retina, called the fovea, has a fine enough resolution to allow for the recognition of small print. Our gaze must therefore move around the page constantly. Whenever our eyes stop, we only recognize one or two words. Each of them is then split up into myriad fragments by retinal neurons and must be put back together before it can be recognized . . . [an act involving at least two] major parallel processing routes . . : the phonological route, which converts letters into speech sounds, and the lexical route, which gives access to a mental dictionary of word meanings.[76]

Even this two-pathway model, however, likely underestimates the "complexity of neural reading systems." (And if single-word decoding "requires multiple cerebral systems to agree on an unambiguous interpretation" of a sequence of letters, we are still a far cry from understanding the networks involved in the management of complex narratives.)[77] Dehaene suggests that "[t]he parallel processing of all a word's characters, the clever resolution of ambiguities, the immediate access to one out of perhaps 50,000 words in the mental lexicon" point to the complexity of "the brain architecture" for reading, a "massively parallel system where multiple interpretations can be simultaneously entertained."[78] Or, as Iser would put it: "the object" of reading is "itself . . . a product of interconnection."[79]

With this, we can return to a question with which we started: how many things can one attend to at once? The answer provided in Austen's novels is not one but many—as many as needed, be it in conversation or at the pianoforte, including a margin for error. While her heroes and heroines never face the cacophony of Hogarth's *The Enraged Musician*, they are never allowed to tune out the hum and buzz of everyday life. Instead, by becoming part of it—incorporating the hubbub without succumbing to it—the abundant press and chaotic richness of social life carries over to their character. Still, there is room for diversion. Austen's novels, blurring the line between distraction and multitasking, portray each as essential to fluid intelligence, a move that foreshadows two trends in cognitive science. Measures of general intelligence, such as Raven matrices or other standardized IQ tests, now incorporate tests of working memory (i.e., our capacity to hold multiple ideas in mind at once for processing) and tests of fluid cognition (our ability to swiftly recombine concepts to produce new solutions). Still more recently, neuroscientific studies have suggested that moments of inattention or mind wandering may be crucial to innovation.[80] One study by Baird, Smallwood, and Schooler, "Inspired by Distraction," suggests that "mind wandering facilitates creative incubation," especially as compared with heightened demand (or "no break"), with distraction producing "substantial improvements in performance [in] creative problem solving."[81]

In the end, mobility of mind is key. Though Austen allows Elizabeth and Darcy a moment of romance following the proposal to illuminate their affection—they walk "without knowing in what direction," with "too much to be thought, and felt, and said, for attention to any other objects"—immersion is kept short (366). The heroine's attention quickly changes: her "spirits soon rising to playfulness again," prompting the question with which this chapter began—the heroine's demand that Darcy "account for his having ever fallen in love" with her and Darcy's reply: "For the liveliness of your mind, I did" (378).

In a letter to her sister, Cassandra, Jane Austen claims Elizabeth's playfulness as the novel's. Austen teasingly suggests that the insertion of distracting chapters into *Pride and Prejudice* would perfectly offset its liveliness: "The work is rather too light & bright & sparkling;—it wants shade;—it wants to be stretched out here & there with a long Chapter—of sense, if it could be had, if not of solemn specious nonsense—about something unconnected with the story; an Essay on Writing, a critique on Walter Scott, or the history of Buonaparté—or anything that would form a contrast & bring the reader with increased delight to the playfulness & Epigrammatism of the general stile."[82] Imagining a playful diversion defining both her protagonist and her novel's style, Austen embeds divided attention within her novel's deep structure. Attention becomes the centerpiece of her system of characterization, in which distraction illuminates the vibrancy of the heroine—as Austen admitted, "I think her as delightful a creature as

ever appeared in print"—and draws the reader with "increased delight" through *Pride and Prejudice*.[83]

From comparisons of characters, we move to comparisons of chapters and passages, and then to novels as a whole. Austen was deeply invested in readers responses to her novels, particularly fluctuating levels of interest. Comparing their reactions—particularly points of attention or distraction—she carefully noted audiences' distinctive styles of engagement, alternately satirizing them and incorporating them into her creative process. She laughs, for example, over one Mr. Fowle's response to *Emma*, who (she learns) "read only the first and last chapters . . . because he had been told that it was not interesting."[84] Another satiric letter details a comic interaction with the unnamed reader, Mrs.——. Austen, having expressed her hopes that the novels she'd written will have "amused" the woman, goes on to narrate and dismiss the lady's absurd reply (which reveals her utter lack of attention to the novel): "'Oh dear yes, very much, very droll indeed, the opening of the house, and the striking up of the fiddles!' What she meant, poor woman, who shall say? I sought no farther."[85] Other moments of readerly inattention, however, clearly affected her. A shaky reading of *Pride and Prejudice*'s second volume aloud leaves her uncertain whether the novel's flow is off: "Your letter was truly welcome, and I am much obliged to you for all your praise; it came at a right time, for I had had some fits of disgust. Our second evening's reading to Miss B. had not pleased me so well, but I believe something must be attributed to my mother's too rapid way of getting on: though she perfectly understands the characters herself, she cannot speak as they ought."[86] Those who demonstrate interest in character development—particularly the characters they ought to—raise her spirits. Her niece's praises of *Pride and Prejudice*, for instance, are particularly "gratifying" because she attends to the right figures: "Her liking Darcy and Elizabeth is enough," writes Austen. "She might hate all the others, if she would."[87] Self-described as "most anxiously" awaiting *Emma*, the Countess of Morley thanks Austen for her copy by describing her attachment to its characters: "I am already become intimate with the Woodhouse family, and feel that they will not amuse and interest me less than the Bennets, Bertrams, Norrises, and all their admirable predecessors."[88]

Austen's catalog of readers' reactions and character commentary suggests an ongoing interest in mapping their comparative attention—delineating the "insensible more or less" of amusement.[89] According to her notes, readers habitually set different works and characters against one another to express their level of interest in a novel, suggesting her style of characterization extended into readers' experience of the fictional minds she creates. Of *Mansfield Park*, we find this collection:

> My Mother—not liked it so well as P. & P.—Thought Fanny insipid. Enjoyed Mrs. Norris.

> Cassandra—thought it quite as clever, tho' not so brilliant as P. & P.—Fond of Fanny.—Delighted much in Mr Rushworth's stupidity.
>
> Miss Lloyd preferred it altogether to either of the others.—Delighted with Fanny.—Hated Mrs Norris.
>
> Charles—did not like it near so well as P. & P.—thought it wanted Incident.
>
> Mrs Dickson.—"I have bought M.P.—but it is not equal to P. & P."
>
> Miss Sharp—"I think it is excellent— . . . Your Characters are drawn to the Life—so *very very* natural & just—but as you beg me to be perfectly honest, I must confess I prefer P. & P."[90]

Even readers who describe disliking a novel, or admit to being distracted, continued this tradition of comparing the works. One Mrs. Augusta Bramstone, who admitted "she thought S & S—and P. & P. downright nonsense," drolly reports being "much pleased with [*Mansfield Park*]; particularly with the character of Fanny," a novel she "[p]referred . . . to either of the others," in part because she "[t]hought Lady Bertram like herself."[91]

A mix of seriousness and satire, Austen's map of how readers divide their attention reveals the importance of her characterization as a drive of audience focus. Those who praise her works tend to attribute their heightened attention to her skillful rendering of characters' fictional minds. One Mr. J. Plumptre, who declares of *Mansfield Park*, "I never read a novel which interested me so very much throughout," attributes his attention to Austen's "characters [being] all so remarkably well kept up & well drawn."[92] Lady Robert Kerr's claim—"You may be assured I read every line with the greatest interest"—is linked to "the excellent delineation of Character . . . with which it abounds."[93] This refrain has become the mantra around which lovers of Austen unite, an object of attention in forums ranging from book clubs and film reviews to proliferating Jane Austen fan clubs. The latest film adaptation of *Pride and Prejudice*, starring Keira Knightley, which garnered enough interest to gross $38.3 million, had reviewers repeatedly commenting on the actress's ability to capture Elizabeth's droll "spirit and wit."[94] A popular virtual forum for devout Janites, *Austenprose*, created in 2014 as "an outlet for [its creator's] life-long Jane Austen obsession," still further personalizes her legacy, openly comparing its online contributors to figures from her novels: "Our staff is as diverse, and as unique, as any cast of characters in a Jane Austen novel ranging from single ladies, newlyweds, mothers, spinsters, scholars, older gentlemen and a Dominican friar all eager to share their passion for Jane Austen and her legacy."[95]

"What do we mean when we talk about the presentation of consciousness in fiction?" Alan Palmer asks in "The Mind Beyond the Skin." Arguing for the ne-

cessity of a new approach to the emphasis on "private and heavily introspective thinking," he urges us to develop an "alternative picture [to capture] the social mind in action."[96] Austen's use of divided attention to craft cognitive richness offers us a model that connects the two; narrated depictions of attention, the bridge between inner mind and external world, interlace the private with the social to bring characters' consciousness to life. As Deidre Lynch notes, Austen's heroines are surrounded by the "ceaseless buzz" of social life,[97] scenes of cognitive engagement staged amid background noise: the creaking door of Austen's sitting room.[98] Setting attention amid distraction allows Austen to construct sophisticated depictions of consciousness that not only model the "social mind in action" but emerge *out of* the social, absorbing and constructed against the minds and events around it. The variations of cognition in Enlightenment and Romantic attention theory, Austen's novels suggest, provided an ample field for experimentation with representing cognitive dynamism. Armed with the strength of Johnson's sustained attention yet without the rigidity of the Gothic, the heroine also possesses the capaciousness to remain situationally aware amid multiplicity (Haywood) and the spontaneity to be able to lapse into creative disorder (Sterne). Elizabeth's mind—divided among and fashioned from—a variety of cognitive types of attention, also gains their texture.

Even readers who protested Austen's violation of the rhetorical rule of brevity to describe consciousness recognized the variety of lifelike mental states this allowed her to portray. In a journal entry from 1836, William Charles Macready describes himself lying "on the sofa, reading Miss Austen's 'Mansfield Park.'" Lengthy cognitive description is the only "fault" he finds with the otherwise "pleasant authoress" and work: "The novel . . . deals too much in descriptions of the various states of mind, into which her characters are thrown, and amplifies into a page [what] a stroke of the pen might give with greater power and interest. [Yet she] is an excellent portrait painter, she catches a man near to the life."[99] Readers' diaries and journals, however, suggest this movement away from external description toward inner cognitive life made her characters seem not only more intricate but also more grounded—mentally *and* physically. As Susan Ferrier noted after reading *Emma*: "Formerly, in *my time*, a heroine was merely a piece of beautiful matter, with long fair hair and soft blue eyes, who was buffeted up and down the world like a shuttlecock. . . . Now they are black-haired, sensible women, who do plain work, pay morning visits, and make presents of legs of pork."[100] This ability to depict "various states of mind" (as well as other characters against which her protagonists can be "thrown" into relief) is clearly what lets her "catch" them so "near to . . . life." Macready's phrasing suggests something upon which others would repeatedly comment. The complexity wrought from divided attention—that observed *in* a character and that enacted as readers divided their own attention to different characters and mental

states—was also what made them seem so real. For Lady Gordon, this sense of captured life answered the riddle of Austen's lasting appeal; audiences' enjoyed her characters even *after* they closed the book: "In most novels, you are amused for the time with a set of Ideal People whom you never think of afterwards or whom you in the least expect to meet in common life, whereas in Miss A-s works . . . you actually *live* with them, you fancy yourself one of the family; & the scenes are so exactly descriptive, so perfectly natural, that there is scarcely . . . a person that you are not inclined to imagine you have at one time or other in your Life . . . been acquainted with."[101] This translation of the lively mind to—and *into*—readers' lives is the ultimate testimony to the power of distraction as a structure of characterization. If cognitive capacity gives Elizabeth the roundness and dimensionality usually associated with psychological depth, distraction lets the heroine's—and the reader's—mind move, modeling the "plastic energy" of a character that continues, like adaptations of Austen, to change, the heroine endlessly rewritten in works from the BBC serial to *Pride and Prejudice and Zombies*.

If readers today are imagined to have attention spans as short as Lydia's "half a minute" focus—as far from Mary's "deep" study of "thorough bass and human nature" as humanly possible—Austen's novels find a balance somewhere in between. When it came to readers, we might best imagine Austen writing not only for "great readers," who, like Mary, are always lying on the sofa "as usual, deep" in one of her novels, but also for those interested in "many things." Like the heroine, this group is more than able to perform the necessary multitasking of reading yet also (and profoundly) able to *look up* when something of interest occurs. Envisioning readers with the capacity to hold multiple ideas for simultaneous processing yet also able to be distracted, to accommodate change, Austen rewrites divided attention as the sign, not of a broken mind, but of cognitive life.

History of Mind and Literary Neuroscience

Jane Austen's *Persuasion* (1818) begins with a distinctive scene of absorption. We find Sir Walter Elliot lost in the baronetage, reading the story of his ancestry:

> Sir Walter Elliot, of Kellynch-hall, in Somersetshire, was a man who, for his own amusement, never took up any book but the Baronetage; . . . there, if every other leaf were powerless, he could read his own history with an interest which never failed—this was the page at which the favourite volume always opened:
>
> ELLIOT OF KELLYNCH-HALL[1]

As we know from *Pride and Prejudice*, Austen was interested in fictionally modeling the degrees of focus one could bring to a book. By *Persuasion*, her character systems are built around intricate layers of juxtaposed habits of attention. Sir Walter's immersion signals his narcissism, "read[ing] his own history with an interest which never failed"; his daughter Mary is too occupied with her hypochondria to attend to books. Anne Eliot, by contrast, is a careful reader of letters and people; constantly aware, she also notes the emotional reactions of those around her. Empathizing with the sorrows of the widowed Captain Benwick, who has been overindulging in romantic poetry, the heroine recognizes him as an introvert "disposed to abstraction" and suggests a more emotionally constructive reading list:[2] "[Captain Benwick] showed himself so intimately-acquainted with all the tenderest songs of the one poet, and all the impassioned

descriptions of hopeless agony of the other . . . that she ventured to hope he did not always read only poetry [and] to recommend a larger allowance of prose in his daily study."[3] Anne not only guides others' literary focus, but uses reading to redirect her own. To tune out her father's and sister's petty commentary on those beneath them, she distracts herself (and turns off her normally acute social awareness) with a letter from home: "Anne could listen no longer; she could not even have told how the poor Admiral's complexion escaped [her father's notice]; her letter engrossed her."[4]

Austen herself admits to using reading as an attentional escape. Like Anne, she enjoyed (and recommended) variety—a mix of essays, military history, travel fiction, and popular novels:

> We [are] quite run over with Books. [My mother] has got Sir John Carr's Travels in Spain from Miss B. & *I* am reading a Society-Octavo, an Essay on the Military Police & Institutions of the British Empire, by Capt. Pasley of the Engineers, a book which I protested against at first, but which upon trial I find delightfully written & highly entertaining. I am as much in love with the Author as I ever was with Clarkson or Buchanan, or even the two Mr Smiths of the city. The first soldier I ever sighed for; but he does write with extraordinary force & spirit.[5]

While able to delight in a book on engineering, Austen was also willing to put down a work of fiction she'd enjoyed on first run-through. Sarah Harriet Burney's *Clarentine* (1796) is set aside *en group* when the family's attention falters on the second and third reading: "We are . . . surprised to find how foolish it is. I remember liking it much less on a 2d reading than at the 1st & it does not bear a 3d at all. It is full of unnatural conduct & forced difficulties, without striking merit of any kind."[6] Like Austen, Johnson devoted much of his life to mapping out the focus we bring to books. "Eyewitness accounts of Johnson reading," Robert DeMaria notes, "suggest that, like most of us, Johnson read in several ways," distinguishing between "study" or "hard reading" and reading for pleasure, which included light "perusal," "curious reading," and "mere reading."[7] While Johnson advocated controlling focus for the sake of one's soul, anecdotes about his reading practices demonstrate more variety and less restraint. Invited to a dinner party, he is unable to put down Sheridan's *Account of the Late Revolution in Sweden* "seized upon" earlier, which he'd been reading ever since "as if he [would] devour it": "He kept it wrapt up in the tablecloth in his lap during the time of dinner, from an avidity to have one entertainment in readiness when he should have finished another; resembling (if I may use so coarse a simile) a dog who holds a bone in his paws in reserve, while he eats something else which has been thrown to him."[8]

The portability and accessibility of reading materials—the ability to be "quite run over with Books"—marks a reading revolution in the eighteenth century.

Such a paradigm shift, first theorized by Rolf Engelsing, has been rightly challenged as overly simplistic. Yet the broad-scale change he describes from the "intensive" reading (close exegesis and rereading) of the few books in one's personal library to the "extensive reading" (quick skimming) of multiple works allowed by increasingly cheap and available texts had real impact.[9] As early as 1625, Sir Francis Bacon had declared that different works deserved different styles of reading: "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested. That is, some books are to be read only in parts; others to be read, but not curiously; and some few to be read wholly, and with diligence and attention."[10] By the Romantic period, however, the practice of skimming had become embedded within entire genres—interestingly, in the very periodical form Johnson hoped would inculcate attention. According to Charles Lamb, the joys of an essay lay as much in the pleasures of light reading as in its contents: "Coming in to an inn at night—having ordered your supper—what can be more delightful than to find lying in the window-seat, left there time out of mind by the carelessness of some former guest—two or three numbers of the old Town and Country Magazine . . . ? Would you exchange it—at that time, and in that place—for a better book?"[11] Lamb's "Detached Thoughts on Books and Reading" explains the delights of skimming by telling the story of Poor Tobin, a man "who latterly fell blind": he "did not regret it so much for the weightier kinds of reading—the Paradise Lost, or Comus, he could have *read* to him—but he missed the pleasure of skimming."[12] Michael Kramp argues that Austen's works are still so widely read because they give American readers the illusion of "social restriction and discipline" they need.[13] Deidre Lynch claims this is due to the allure of personal identification; the sophistication we grant ourselves in unpacking the hidden depths of Austen's heroines is what continues to attract us.[14] Yet I would argue that the reason her novels continue to hold readers' interest—and do so after repeated rereadings—is because her works also incorporate a final form of divided attention: a dual structure that allows readers both to engage lightly, claiming the delights described by Lamb, and to read with heightened attention to her finely wrought structures of characterization, irony, and social hierarchy. Writing novels that could be read with varying degrees of focus, and tabulating readers' attention to them, Austen's lasting appeal is due in no small part to her development of a narrative framework to engage multiple readers' styles of concentration.

Interdisciplinarity: From Theory to Practice

One of the aims of this book is to trace the history of these theories and practices of attention—particularly those that continue to shape cognitive science. Normally, things would end here: laying out historical implications, offering suggestions for future research, inserting a few carefully (or not so carefully)

hidden injunctions about restructuring our methodological approach to interdisciplinary scholarship.[15] Yet writing it has led not just to a richer knowledge of eighteenth-century attention theory and reading practices but to an experiment that brings together literature and the neuroscience of reading to discuss two questions central in both humanities and sciences: (1) What captures our attention when we read? (2) What unique styles of focus can we bring to a book based on our disciplinary training—particularly, training in literature? Our experiment uses neuroscientific technologies to explore how brain activity changes when we bring different levels of attention to a novel. In this case, we used fMRI, functional magnetic resonance imaging, to investigate the neural differences between close reading and pleasure reading for two novels by Jane Austen: *Persuasion* (our pilot) and *Mansfield Park* (the final experiment).

From the beginning, Enlightenment discussions about attention shaped our experimental question about literary focus. Ian Watt argues that eighteenth-century print allowed for a new kind of narrative immersion: "mechanically produced . . . letters," he claims, "can be read much more automatically: ceasing to be conscious of the printed page. . . . [W]e surrender ourselves entirely to the world . . . which the printed novel describes."[16] Yet, as we've seen, writers of the period vacillated between praising and deriding readerly immersion, a habit that could be seen as training steady (and thus fixed) attention or as modeling the madness of romantic-absorbed reading we saw in Lennox's heroine. Isaac Watts joined Johnson in criticizing light reading, fearing that relaxed attention would encourage minds to wander. Those "skim[ming] over the Pages like a Swallow over the flowry Meads in *May*," he argued, risked missing "Advances in the Pursuit of Truth" garnered by those who "undergo the Fatigue" of study.[17] Austen's *Northanger Abbey*, by contrast, satirizes such views and mocks novelists who refuse to show their heroines pleasure reading or who apologize for characters when caught: "I am no novel reader—I seldom look into novels—Do not imagine that *I* often read novels. . . . Such is the common cant." Unlike writers who reject audiences' enjoyment of fiction, Austen embraces the novel and the full range of reading styles it invites, a genre she claims can convey "the greatest powers of the mind."[18]

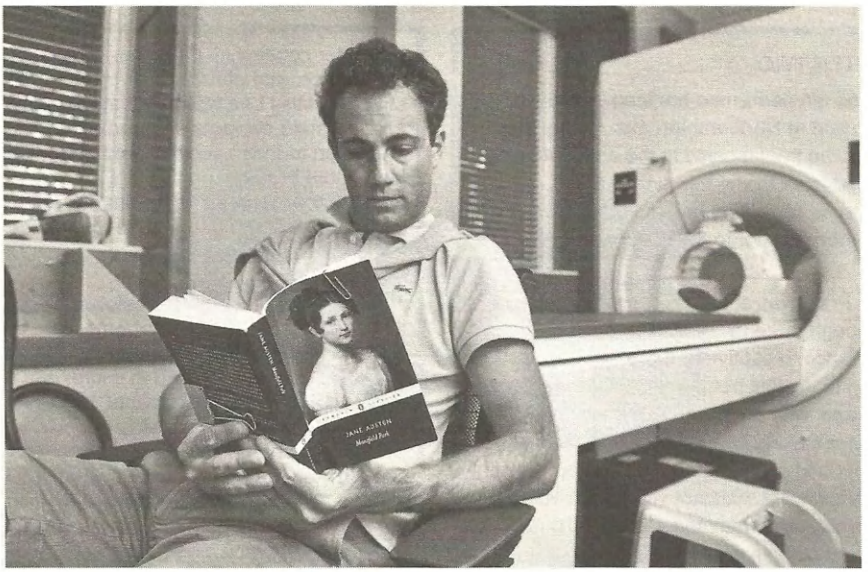
Our study took up this debate and explored the questions it raised via an fMRI experiment, becoming one of the first forays into the field of literary neuroscience.[19] Integrating two neuroscientific tools, we used fMRI and fMRI-compatible eye tracking to explore changes in neural activity that emerge when switching between pleasure reading and close reading: the difference between being "lost in a good book" and formal literary analysis.[20] If pleasure reading is the practice of becoming immersed (often to the point of distraction), close reading asks readers to bring critical focus to the analysis of narrative form.[21] According to Elaine Showalter, close reading is "a deliberate attempt to de-

tach ourselves from the magical power of story-telling and pay attention to language, imagery, allusion, intertextuality, syntax, and form. . . . In a sense close reading is a form of defamiliarization we use in order to break through our habitual and casual reading practices. It forces us to be active rather than passive consumers of the text."[22] Asking participants to move between these two modes of reading allowed us to explore cognitive differences in focused reading as well as the neural complexity of a core skill trained in the English classroom. The first tool we used, fMRI, provides a dynamic picture of blood flow in the brain—basically, where neurons (which need oxygenation) are firing and when.[23] To get a richer sense of the physiology of literary reading, we also incorporated fMRI-compatible eye tracking, a technology that visualizes how subjects' eyes are moving as they read, allowing us to track visual attention, including saccades (microjumps the eye makes in reading), and moments when people speed up, linger over a passage, or reread. Our project, which performed brain scans on Ph.D. candidates in English and comparative literature, tapped an ongoing debate over the value of attention cultivated by humanistic training. Our experiment results are far from complete—first, because the data analysis is so complicated for an fMRI study of natural reading; second, because I wanted to finish the book you now hold in your hands. The point of talking about the experiment here is not the final results: we're not done. Instead, since I am the project lead (in English) with collaborators in fields ranging from neuroscience to radiology, computer science to second language studies, my goal is to demonstrate that there's a way for literary scholars (eighteenth-century or no) to work on equal footing with their colleagues in cognitive science, not only learning about the most relevant research on reading, narrative processing, empathy, etc., but also crafting entirely new experiments around literary questions.

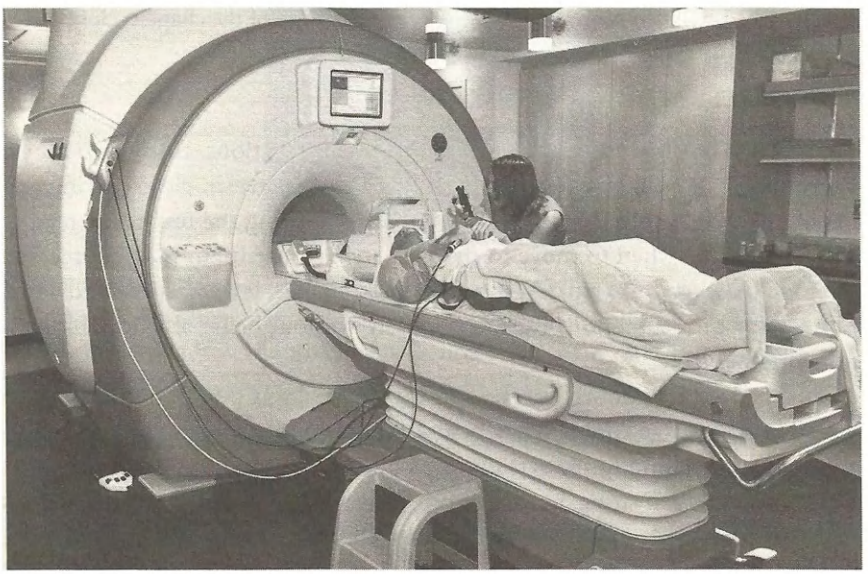
Literary Attention: An fMRI Study of Reading Jane Austen

The following is how the experiment was conducted. When students entered the lab, they began by reading the first chapter of *Mansfield Park* outside the scanner, moving at their own pace and recording the time it took them from start to finish. Next, the students went into the MRI scanner. They read the entire second chapter as we gathered data about brain activation, recorded their eye movements, and monitored changes in heart rate and respiration. Each subject moved through the text, paragraph by paragraph, at his or her own speed, pushing a button-clicker in his or her hand when ready for the next section of text.

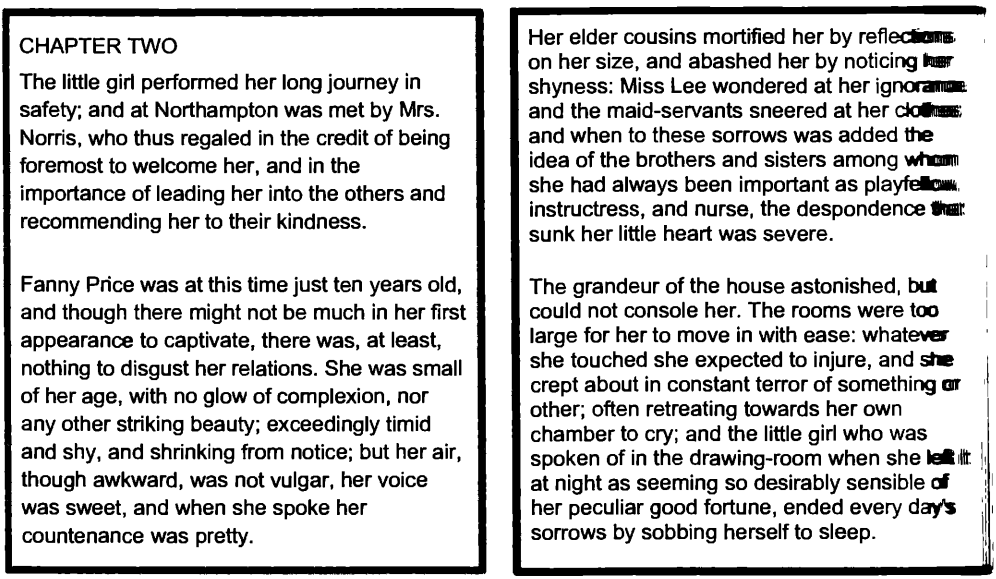
To make it possible for subjects to read in the scanner, chapter 2—which begins with Fanny Price's journey to Mansfield Park and ends with her acclimation to the household of her wealthy relatives—could not be presented



A subject reads chapter 1 of *Mansfield Park* outside the scanner. Photo by Linda Cicero.



A student enters the MRI scanner to read chapter 2 of *Mansfield Park*. Participants read a digital version of the text through a mirror above their eyes. Photo by Linda Cicero.



CHAPTER TWO

The little girl performed her long journey in safety; and at Northampton was met by Mrs. Norris, who thus regaled in the credit of being foremost to welcome her, and in the importance of leading her into the others and recommending her to their kindness.

Fanny Price was at this time just ten years old, and though there might not be much in her first appearance to captivate, there was, at least, nothing to disgust her relations. She was small of her age, with no glow of complexion, nor any other striking beauty; exceedingly timid and shy, and shrinking from notice; but her air, though awkward, was not vulgar, her voice was sweet, and when she spoke her countenance was pretty.

Her elder cousins mortified her by reflections on her size, and abashed her by noticing her shyness: Miss Lee wondered at her ignorance, and the maid-servants sneered at her clothes; and when to these sorrows was added the idea of the brothers and sisters among whom she had always been important as playfellow, instructress, and nurse, the despondence that sunk her little heart was severe.

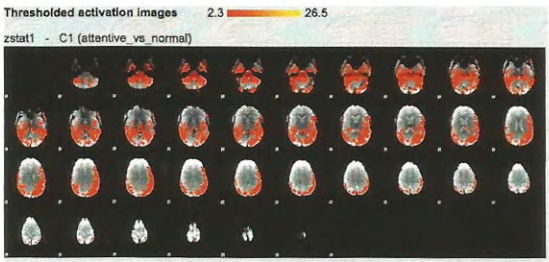
The grandeur of the house astonished, but could not console her. The rooms were too large for her to move in with ease: whatever she touched she expected to injure, and she crept about in constant terror of something or other; often retreating towards her own chamber to cry; and the little girl who was spoken of in the drawing-room when she left it at night as seeming so desirably sensible of her peculiar good fortune, ended every day's sorrows by sobbing herself to sleep.

Two sample sections from *Mansfield Park* marked for pleasure reading or close reading. In our experiment, the pleasure reading text was framed with a green border (*above left*), the close reading text with a red border (*above right*). Each block of reading (close or pleasure) included eight consecutive segments of text similar to those above. Students switched between reading styles twice over the course of the chapter; close and pleasure reading sections were randomized.

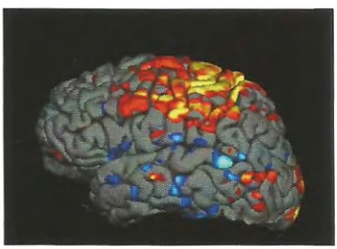
page by page but had to be broken up into smaller sections: thirty-two blocks of text total.[24] We told participants when to switch between close reading and pleasure reading, using the color of the box surrounding the text being read to alert participants when to move to the next style of attention: pleasure reading (green) or close reading (red). At the end, the students left the scanner and wrote a short essay on the sections they read closely without being able to look back at the original text.[25]

Data analysis is ongoing, yet the first big surprise was this: patterns of blood flow seem to change dramatically across the brain when each student moves from pleasure reading to close reading. While one might have expected to see pleasure centers activating for the more relaxed style of reading and regions associated with work, attention, and cognitive load at work for literary analysis, what we saw was something else.

Take, for example, the preliminary image of brain activation shown in the figure on the following page, comparing all moments of close reading for one subject to those spent pleasure reading. Here, we see literary analysis activat-



In this early data image, a subject (s4) demonstrates widespread activity across brain regions for close reading, visualized in horizontal slices from the top of the brain to its base. Regions in red represent areas of increased blood flow for all paragraphs of close reading, on average, as compared to paragraphs of pleasure reading.



A brain image contrasting close reading and pleasure reading in a subject from our pilot study of *Persuasion*. Red and yellow mark areas of heightened activation for close reading. Regions in blue and white mark increased activation while pleasure reading.

ing diverse regions across the brain.[26] Looking in more detail at a single case study—an individual brain image, also on this page—points toward what we've found most exciting about the early results from our fMRI study of reading Austen.[27] In close reading a novel by Jane Austen, this reader activates unexpected regions of the brain that include not just the executive functions traditionally associated with directed attention (the dorsolateral prefrontal cortex) but the somatosensory cortex, an area we engage to process tactile stimuli and place ourselves spatially in the world, as well as the motor cortex, a region dedicated to the physical control and mental imagery of movement. Yet close reading is not the only form of literary focus showing a distributed pattern of increased brain activity. As we can see from the brain image pictured, this participant, like so many in our study, also displays strong regions of activity for pleasure reading, in blue, including portions of the temporal cortex that are associated with language processing.

Should such trends hold across the group, there are a number of interesting implications for literary studies as well as for theories of education. If so, close reading cannot be described as simply an elevated attention to literature, with pleasure reading cast as a "lesser" mode of focus—or, as Showalter put it, "active" versus "passive" reading. Instead, each style of engagement has its own cognitive demands and produces its own neural patterns. Pleasure reading and close reading may activate overlapping but distinctive sets of brain regions to create discrete "neural signatures," with the widest brain activation created by moving between both kinds of concentration in reading.

Thinking about the historical phenomena behind Engelsing's binaries ("intensive" and "extensive reading") allowed us to illuminate—from a humanist perspective—this intersection between attention and reading. Most previous experiments on attention explored the neural challenges presented by a stimulus: usually, a series of shapes to look at, sounds to listen to, or individual words to read. Often by necessity, few researchers tackled more than a word, phrase, or sentence in fMRI studies; consequently, none could examine variations in attention we bring to reading a literary text.[28] Our study of Austen thus became one of the first to use fMRI to explore how the brain responds to literature, as well as one of the first experiments to investigate what we attend to while reading a novel—here, a full chapter from *Mansfield Park*. Fortunately, methods for analyzing fMRI data have advanced significantly in the past decade, particularly when it comes to the complexity of aesthetic response. One fMRI study from Japan in 2009, for example, found that the experimenters could predict from reconstructed brain images whether a student had been viewing an artwork by Picasso or Dali.[29] We know, moreover, that sentences like "Pablo kicked the ball" or "Raymond grabbed the egg" activate specific brain regions associated not just with general motor activity, but with the specific arm or leg being imagined.[30]

Drawing on attention's history, our study seeks to contribute to the neuro-

science of reading, revealing not simply the ideological and historical underpinnings of current experiments but the importance of how we concentrate to the neural bases of literacy. Dehaene describes the neural networks involved in reading as a web of "bi-directional . . . cortical connectivity," which activate not only expected regions (Broca's area, Wernicke's area, the visual cortex) but also extended webs that link pronunciation, articulation, and meaning.[31] Investigating the brain regions involved in degrees of focus, our study aims to reveal a still more comprehensive system of neural exchanges involved in reading literary works.

The Value of Literary History

So why end a book on distraction with a neuroscientific experiment on attention? First, being open about the fact that I was writing an eighteenth-century history while conducting an fMRI study (its own daily experiment in multitasking) lets me put more punch behind one of my book's points: that literary descriptions of distraction advanced, and often complicated, scientific theories of concentration in eighteenth-century psychology and contemporary cognitive science. Experiments on attention, down to the cognitive categories and subfields that structure neuroscientific testing (e.g., selective attention, divided attention, inattentional blindness, etc.), have been shaped by debates from the Enlightenment and would look quite different if divided up in different ways. Turning to distraction—for example, the military metaphors of standing at attention—lets us see connections, as well as demarcations, between work on selective focus and lapses of situational awareness and between vigilance and inattentional blindness. The historical debates that arose as a unifocal model of attention came into competition with a multifocal vision of simultaneous thought continue in the friction between neuroscientific models of focus as serial processing ("spotlight theories of attention") and those that emphasize attention as parallel processing (from working memory studies to "dynamic attention theory"). Paying closer attention to the history of distraction and engaging self-consciously with the history of arguments that shape attention studies as a discipline can fine-tune existing models to yield new experimental paradigms with enormous potential for advancing our knowledge of dynamic brain function, both inside and outside the sciences. It also reframes our selective focus on focus as a form of inattentional blindness, allowing us to see anew the importance of exploring our many moments and types of scattered, lapsed, and intermittent awareness alongside the neural networks involved in attention.

Beyond Austen, one can imagine *Tristram Shandy* inspiring a suite of studies on the dynamics of narrative overload; this book's historical research on theories of attention and poetic rhythm from Vives to Darwin is laying the groundwork for a new experiment, codesigned by literary scholars and neuroscientists, on whether (and how) a sonnet's imagery—as well as its ability to rhythmically

structure attention—affects readers' aesthetic pleasure. Such work not only offers a more reciprocal model of interdisciplinary exchange, with primary investigators in both humanities and sciences, but affirms the importance of authentic intellectual exchange that both appreciates knowledge and methodologies across disciplines and draws out the power of their productive dissonance. As Jonathan Kramnick notes, cognitive literary studies can risk a unidirectional model of interdisciplinary scholarship: despite "all the excitement," cognitive approaches to literature often involve "one-way application[s] of work from the sciences to the humanities."[32] The most obvious model of this kind of prioritization (and idolization) of science, imported wholesale into literary studies, comes from scholars like Jonathan Gottschall, who capitalize on the shock value of declaring, "Literary studies should become more like the sciences. Literature professors should apply science's research methods, its theories, its statistical tools, and its insistence on hypothesis and proof. Instead of philosophical despair about the possibility of knowledge, they should embrace science's spirit of intellectual optimism. If they do, literary studies can be transformed into a discipline in which real understanding of literature and the human experience builds up along with all of the words."[33] What this positivist model lacks—among other things—is an empiricist sense of scientific skepticism, as well as a sense of the historicity of objectivity and fact, much less an appreciation of the intrinsic value of humanistic approaches and training.[34] In *Biographies of Scientific Objects*, Bruno Latour describes the excavation of the mummy of Ramses II, flown to Paris to be operated on by a cadre of expert, mask-protected scientists, who diagnose him, postmortem, with a case of bad teeth—and possibly tuberculosis. Latour uses the mummy's transit to emphasize, not the possibility of scientific knowledge about the long-dead pharaoh, but the difficulty of transporting scientific data across history and space, using the empirical (and technological) to displace the past: "Of course, we have learned, after reading science studies of all sorts, that facts cannot . . . escape their local conditions of production."[35] This confinement to local, historical conditions is especially true of the brain and, by extension, neuroscientific studies. Obviously, neither Jane Austen nor her contemporary readers are available for fMRI scanning. What may be less obvious is this: our study cannot ever be applied retroactively (or easily) to theorize the attention of historical readers. In his 1822 novella, *Master Flea*, E. T. A. Hoffman satirized this fetish of complete cognitive transparency. Building on "ideas taken straight from Erasmus Darwin," Edward Reed notes, the work imagines that the hero "has built an amazing microscope that enables [him] to see so minutely into other people's brains that he can read their thoughts directly from the movements of their nerves."[36] In Hoffman's parody, cognitively transparency is less enlightening than it might seem. Looking through the microscope reveals a strange flaw when people retreat to pedantry: "[he] saw the

strange network of veins and nerves, but noticed also that when the people talked with exceptional eloquence about art and learning . . . their veins and nerves did not penetrate into the recesses of their brains, but curved back, so that it was impossible to discern their thoughts with any clarity. He communicated this observation to Master Flea, who . . . remarked that what Peregrinus had mistaken for thoughts were nothing more than words, vainly endeavoring to become thoughts."[37] It is at these points where thoughts "curve back" that interdisciplinary approaches find their strongest argument. All too often the story of the history of science is cast as a tale of constant progress.[38] Yet, as the material history of distraction and the relationship of this history to dominant models of cognition shows, the history of science occurs in fits and starts, laced with doubling-backs and bursts of accidental insight, often driven by parody or satire. Indeed, the eighteenth-century friction between an Enlightenment vision of reading and reason as cumulative progress and a vision of the serendipitous, often parallel, cross-referencing of ideas is also the generative problem of interdisciplinary scholarship: the power of productive dissonance between fields.

In terms of distraction, Wordsworth represents Romanticism's eighteenth-century inheritance when he claims the moment when focus relaxes as the catalyst of poetic insight. His ear pressed to the ground listening for an approaching coach, he suddenly finds himself diverted:

> I have remarked, from my earliest days, that if, under any circumstances, the attention is energetically braced up to an act of steady observation, or of steady expectation, then, if this intense condition of vigilance should suddenly relax, at that moment any beautiful, any impressive visual object, or collection of objects, falling upon the eye, is carried to the heart with a power not known under other circumstances. Just now, my ear was placed upon the stretch, in order to catch any sound of wheels that might come down upon the lake of Wythburn from the Keswick road: at the very instant when I raised my head from the ground, in final abandonment of hope for this night, at the very instant when the organs of attention were all at once relaxing from their tension, the bright star hanging in the air above those outlines of massy blackness fell suddenly upon my eye, and penetrated my capacity of apprehension with a pathos and a sense of the Infinite, that would not have arrested me under other circumstances.[39]

In this passage, we find the shift foreshadowed by Sterne's and Austen's valuations of distraction as liveliness of mind brought to fruition; in Wordsworth, distraction becomes the experiential catalyst of the sublime. A whole-cloth reversal of the Cartesian paradigm that holds that intellectual breakthroughs result from uninterrupted meditation, this model holds that the "relaxation" of attention produces insight "not known under other circumstances." In so doing, it posits distraction

as integral to understanding, the sign by which the project of intelligence may be assembled and comprehended most fully. While attention, in the form of "steady observation," is still perquisite to this revelation, it is only as a mode *to be broken*—overload writ revelatory—that yields the object of intellectual pursuit.

Yet it is Keats who emblematizes the Romantic incorporation of distraction within what Alan Richardson calls "the neural sublime."[40] In a letter to J. H. Reynolds from 1818, the poet translates Sterne's puzzled skein of dashes into a playful tapestry to illustrate his associative celerity:

> —So you see how I have run away from Wordsworth and Milton; and shall still run away from what was in my head, to observe, that some kind of letters are good squares others handsome ovals, and others some orbicular, others spheroid. . . . If I scribble long letters I must play my vagaries. I must be too heavy, or too light, for whole pages—I must be quaint and free of Tropes and figures—I must play my draughts as I please, and for my advantage and your erudition, crown a white with a black, or a black with a white, and move into black or white, far and near as I please—I must go from Hazlitt to Patmore, and make Wordsworth and Coleman play at leap-frog—or keep one of them down a whole half holiday at fly the garter—"From Gray to Gay, from Little to Shakespeare"—Also as a long cause requires two or more sittings of the Court, so a long letter will require two or more sittings of the Breech wherefore I shall resume after dinner.—[41]

Keats's "Epistle to My Brother George" (1816) rewrites the idea of using diversion—particularly writing—as a cure for monomania into a new kind of panacea. Channeling distraction into poetry relieves a mournful mind:

> Full many a dreary hour have I past,
> My brain bewildered, and my mind o'ercast
> With heaviness; in seasons when I've thought
> No spherey strains by me could e'er be caught
> From the blue dome, though I to dimness gaze
> On the far depth where sheeted lightning plays;
> Or, on the wavy grass outstretch'd supinely,
> Pry 'mong the stars, to strive to think divinely:[42]

Despite his strained effort to mirror Wordsworth's epiphanic moment staring at the sky, the times that bring Keats "relief from pain" are those when sudden diversion yields poetic insight: "when some bright thought has darted through my brain."[43]

In "My Books," Leigh Hunt places such marginal instants of distraction at the center of the creative process, suggesting the best setting for writing is a study filled with books, potentially half-open in a state of creative clutter, with a window open:

> I dislike a grand library . . . with books all in Museum order. . . . I [look] sideways at my Spenser, my Theocritus, and my Arabian Nights; then above them at my Italian Poets; then behind me at my Dryden and Pope, my Romances, and my Boccaccio; then on my left side at my Chaucer, who lay [open on my] writing-desk. . . . There [on my bookshelf] Mr. Southey takes his place again with an old Radical friend: there Jeremy Collier is at peace with Dryden: there the Lion, Martin Luther, lies down with the Quaker lamb, Sewell: there Guzman d'Alfarache thinks himself fit company for Sir Charles Grandison. . . . Even the "high fantastical" Duchess of Newcastle.[44]

The generative power of such bookshelves lies in the odd positioning of authors along with the unusual connections their pairings produce: "It is true, one forgets one's books while writing: at least they say so. For my part, I think I have them in a sort of *sidelong mind's eye*; like a second thought, which is none; like a waterfall, or a whispering wind."[45]

Hunt's suggestion that there is power in glancing over just the covers of books marks the profound shift we see in the period's changing perceptions of the distracted reader and mind. After Johnson, however, we see more and more cases of writers willing to accommodate diversion. Be it the teasing chapter titles in Haywood, "Might as Well Be Passed Over as Read"; Sterne's cat-and-mouse metaplay with Madam Reader; or an Austen heroine fiercely declaring herself "not a great reader," novelists between 1750 and 1830 are increasingly devoted to managing the distracted reader, experimenting with using inattention as a conceit to attract and hold readers' notice. Much of this, of course, is still a ruse. We often talk about the history of the novel (and of literature in general) in terms of more subtle innovations in literary form—the crafting of verisimilitude, the balance of description and narration, the refinement of irony, the changing uses of allegory and metaphor. Indeed, incorporating distraction into literature was formally generative, prompting key narrative experiments with authorial persona and point of view, as well as style, suspense, and characterization. But for any of these nuances to work on readers, one first and foremost needed to capture their notice, particularly in a period moving from a coterie-based system of aristocratic patronage toward one reliant on the purchasing power of a popular audience. As writers from Johnson to Austen discovered, distraction gets readers' attention. Reading these works in terms of distraction, moreover, complicates our traditional story of the novel's eighteenth-century origins, revealing not simply an attempt to represent middle-class readers but an ongoing struggle to sustain their concentration by accommodating the possibility of its lack.

According to Watt's *The Rise of the Novel*, "The main problem in portraying the inner life is essentially one of timescale. The daily experience of the individual is composed of a ceaseless flow of thought, feeling and sensation;

but most literary forms . . . tend to be of too gross a temporal mesh to retain its actuality."[46] Watt claims the novel was a genre particularly amenable to the process of rendering the dynamism of cognition—in this case, the paradoxical "not-thought" of distraction but also (as other scholars have noted) the mental experience of boredom, curiosity, happiness, etc.[47] As Edward Reed notes, "one way in which modern readers can trace the underground history of psychology is through works of fiction."[48] In the eighteenth century, where the disciplines of literature and natural science had yet to separate—a period in which Darwin explained chemical bonding in couplets and Percy Bysche Shelley conducted experiments on electricity in his basement—this is particularly true. Literary experiments with mapping patterns of attention, in fact, culminate in the nineteenth-century mixture of physiology and novel theory described by Nicholas Dames's *Physiology of the Novel.* Novelists from Thackeray to Gissing, emphasizing everything from distraction's negative liberty to the power of speed-reading, joined a cadre of scientists interested in using the dynamism of novel reading to theorize the ebb and flow of attention and distraction.[49]

We like to think today that distraction is new, the product of our overactive smartphones and ever more hectic pace of life. Yet as evidenced by the distracted characters—and, more important, the concerned authors—of the eighteenth century, information overload was just as possible in print culture as in an age ruled by digital media.[50] We may have unprecedented sound pollution: cars honking, airplanes overhead, the distractions of our televisions, iPads, iPods, cell phones, and alarms. But we also have vastly improved sound *protection*, from double-paned windows to noise-canceling headphones. If modern communication technology has produced the problem of distracted driving, those of the eighteenth century faced the issue of managing horse-driven coaches: navigating unpaved roads filled with ruts and rainwater, keeping horses from balking, and dodging other traffic and thronging pedestrians, a challenge that all too often left vehicles overturned. Rather than adopting a progressive model of distraction that increases over time, this book reveals questions of attention to be an equally pressing—if not more central—issue for those of the Enlightenment. Not only does distraction move in unpredictable patterns, avoiding a teleological line from less to more distraction, concerns about inattention move in waves. Claims about the distracted mind, moreover, cannot be applied across large swaths of across time but vary widely between time periods, individuals, and groups.

Articulating this argument here, in fact, opened up new space to appreciate individual differences in reading within our fMRI study. As Austen reminds us, different readers can have radically different responses to the same book. *Persuasion* may begin with Sir Elliot immersed in the baronetage, but Walter's infatuation is quickly set against his daughter Elizabeth's extreme dislike.

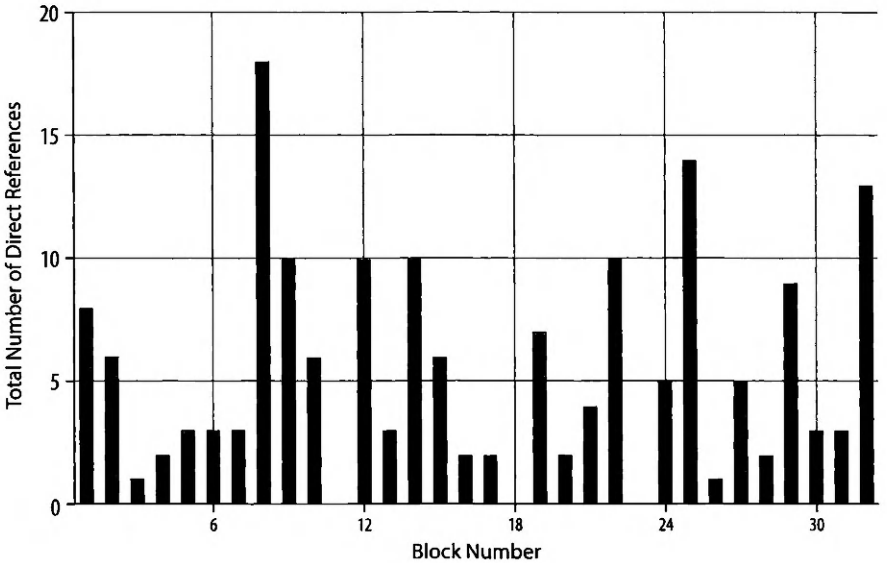
(She can scarcely bear to pick up the book because it reminds her that she is unmarried—recalling in particular "a [marital] disappointment . . . which that book . . . must ever present the remembrance of.")[51] Thinking about this—first historically, in Austen, and then in our neuroscientific study *of* Austen—drew my attention back to what is perhaps the most interesting aspect of our fMRI study: similarities and differences in individual attention.

As her contrast of Walter's and Elizabeth's reading habits reminds us, character matters. Patterns of attention may be shared—cognitively, narratively, and socially—but they also rely on a profoundly personal dynamic of preference, experience, and taste. Some of the most interesting questions for future analysis raised by our fMRI experiment arise from integrating the eye tracking, visual marks of what people noticed as they read *Mansfield Park*, and the final essays: what they attended to and remembered. This can work as a starting point for new data analysis because, to my delight (the second major surprise of the Austen study), subjects actually quote specific passages from the novel without being able to look back.

The ability to link patterns in the essays with the data yielded by the brain scans and eye tracking promises to offer new insights not only into the unique narrative patterns that seem to foreground, or draw literary attention, but also into this fundamentally individual aspect of literary reading. As we can see below, a graph of collective quotes from all subjects' essays, some patterns of literary attention are shared, leading to intriguing peaks in quoting for sections such as 8, 25, and 32. Clearly, certain sections of *Mansfield Park* drew more attention than others across the group, while others were almost entirely neglected. The focus required to quote passages by memory exceeds even that of traditional close reading, in which scholars usually have the page by their side. Still more powerfully, our eighteen subjects from the final study end up quoting (e.g., making direct references to chapter 2 of *Mansfield Park*) about 168 times total. Approximately 140 of these references come from close reading sections, which means subjects are also remembering which sections they close read an astonishing 89 percent of the time.

Numerous subjects were drawn to moments where the recently adopted heroine, Fanny Price, is derided by rich relatives for her supposedly poor intelligence, as well as to more concrete sections of narrative in the otherwise abstract narrative. One essayist notes that the heroine is described as "ignorant" when set against her cousin's "accomplishments." Another notes a scene where Lady Bertram says Fanny is "stupid, [and] must take more pains," comparing the girl to her pug.

> Subject 1: It's Edmund [who first] notes to himself, after their heartwarming encounter upon the stairs, that Fanny had become "an object of interest." It is as an object, particularly a class object-lesson, that she has become useful to the family.

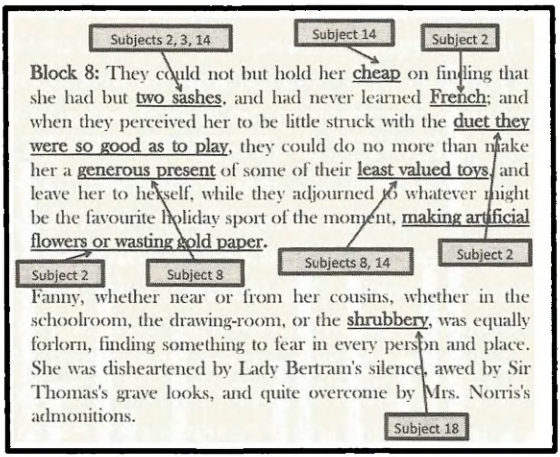


Group quoting patterns, by block, for *Mansfield Park*, chapter 2. This graph tallies all quotes—or direct references to the text—from subjects' essays across the thirty-two blocks in our experiment.

> (Lady B's curious and equivocating defense of the girl (she was stupid, [and] must take more pains . . . but Lady B had always found "her useful in" . . .) suggests a barbed comparison between Fanny's value and that of Pug, also good at ("*fetching*" things, presumably, and "*carrying.*")
>
> Subject 2: Fanny's position as a member of the lower classes is marked primarily by her lack of education, or, as the text calls it, her "*ignorance.*" The narrative emphasizes that Fanny can read and write, but does not have many skills beyond this, while her cousins are able to speak French, play music, and paint, making them "*accomplished*" young women.

Participants' attraction to the more concrete sections of narrative is visible on the next page in an image of cross-group quoting patterns for block 8.

Other patterns, however, are unique: Subject 1, for example, noticed Austen's use of sibilance in describing a visit from Fanny's brother, recently gone to the navy: "(*sea, sister, sailor, serious* . . .)." Subject 2 instead analyzed a moment when the narrator describes the Bertram children playing with "artificial flowers." A final subject's essay focuses on the moment when the heroine first enters the Bertram house, analyzing Austen's use of language to convey Fanny's feeling of smallness amid the mansion's vastness. "As Fanny arrives at the estate, Austen . . . allows her syntax to recall the immensity of the space: listing the many reasons


Subjects 2, 3, 14
Subject 14
Subject 2
Block 8: They could not but hold her cheap on finding that she had but two sashes, and had never learned French; and when they perceived her to be little struck with the duet they were so good as to play, they could do no more than make her a generous present of some of their least valued toys, and leave her to herself, while they adjourned to whatever might be the favourite holiday sport of the moment, making artificial flowers or wasting gold paper.
Subject 2
Subject 8
Subjects 8, 14
Subject 2
Fanny, whether near or from her cousins, whether in the schoolroom, the drawing-room, or the shrubbery, was equally forlorn, finding something to fear in every person and place. She was disheartened by Lady Bertram's silence, awed by Sir Thomas's grave looks, and quite overcome by Mrs. Norris's admonitions.
Subject 18

All words directly cited across eighteen participants for the highly referenced block 8, demonstrating their strong attraction to citing or quoting concrete words ("sashes," "toys," "flowers," "paper"). This also reflects our latest data analysis regarding subjects' likeliness to cite more concrete nouns and verbs in chapter 2 ($p < .01$, Cohen's $d = .67$ SD) according to the Brysbaert concreteness scale.

for Fanny's fears, joining them with semicolons and colons, Austen suspends a block of text like a gothic vault over the 'little' girl" (subject 9).

Though each reader may have shared patterns in eye tracking and brain activation, none will be *exactly* the same. As we gather information about blood flow, brain regions, and saccades, we will also be gathering these individual idiosyncrasies—dynamics for literary attention that are shaped, like those of Austen's characters, by experience, tracing the line between reading with "disappointment" and "with an interest that never fail[s]." This project of mapping joint attention alongside individual differences will require creative and unprecedented integrations of fMRI and eye tracking, qualitative and quantitative data, and methods from literature, digital humanities, and cognitive science. As this reminds us, moreover, cognitive literary studies can be a field committed to expanding complexity: to dynamic mappings of aesthetics and mind, raising new questions with the potential to contribute to narrative studies, work in digital humanities, and reader-response theory by reconnecting them with intricate real-time cognitive responses to art.

Stephen Ramsay and Geoffrey Rockwell argue that digital artifacts are tools, "hermeneutical instruments through which we can interpret other phenomena . . . 'telescopes for the mind' that show us something in a new light."[52] Neuroscientific images need not be seen as scientific "answers" but may be used as tools able to prompt new literary insights. In the end, an fMRI image (and the micro-

scopic view it offers of the brain's responses to literature) is simply another piece of information. It is a new kind, to be sure, with unusual elements to contextualize, integrate, and theorize. Yet like a letter from Austen's sister Cassandra, an eighteenth-century conduct book, a reader's diary, or a Foucaultian theory, it all depends on the interpretations we produce. As a scholar interested in literary neuroscience and the history of mind, I return to narrative analysis and historical context—that is, to literature and culture. As Jonathan Kramnick notes, if "cultural artifacts like works of literature are part of the environment our minds build, respond to, and build again," then "the historical and formal methods of our discipline . . . contribute [deeply] to understanding how the mind works."[53] Instead of viewing our fMRI study's results as offering some final scientific "truth" about the cognition of literary analysis, or of reading Jane Austen, brain images must be reinterpreted as artifacts of the intersection between a historically (and culturally) embedded text and the brain that receives it.

Literary neuroscience is just emerging as a field, and what is most exciting lies ahead. Our Austen study has become a central project within our new lab in the English Department at Michigan State, Digital Humanities and Literary Cognition (DHLC), a space devoted to cultivating a range of interdisciplinary projects in literary neuroscience, digital humanities, and the history of mind. Here, our neuroscientific research on literary attention has springboarded a series of future projects, including an fMRI study of poetry and cognitive rhythm (MSU, NYU); an emerging experiment on empathy and trauma narratives (MSU, Duke); and a final project investigating patterns of distraction in fiction reading on an iPad or Kindle as opposed to traditional book (MSU, Stanford, and Sweden). These new experiments are emerging in tandem with a series of important research projects in the history of mind. One of our lead undergraduates working on the fMRI study of *Mansfield Park* is writing her senior thesis on Austen, education, and eighteenth-century theories of memory; another is investigating eighteenth-century representations of artificial memory in literature from *Robinson Crusoe* to *Tristram Shandy*.[54] One Ph.D. candidate, whose research focuses on empathy and philanthropy in nineteenth-century literature, is using her work to help design our emerging fMRI experiment on trauma narratives, empathy, and service learning; a final group of graduate students and undergraduates are working on projects linking digital humanities, narratology, literary aesthetics, and history of mind.[55]

Institutional spaces such as the DHLC make it possible to integrate literary neuroscience and history of mind more rigorously, creating what Peter Galison calls "trading zones," or moments of "local coordination" and specialist translation: here, exchanges between science and humanities.[56] Currently, the lab facilitates conversations among faculty and students in English, cognitive science, biology, education, neural engineering, radiology, creative writing, dig-

ital humanities, computer science, and linguistics, working to generate a new language for interdisciplinary research on the brain. Clearly, such work faces challenges; things will inevitably be lost in translation, and these "trading zones" come with an extensive learning curve. While one might be tempted to focus on the smoother moments of interdisciplinary translation in our experiment, my experience suggests it's the very gaps between humanities and sciences—the moments of productive dissonance—that provide the most synergy for cognitive literary studies: both literary neuroscience and history of mind. In the back and forth between the neuroscientific and the narrative, between the literary and the cognitive, and the friction that emerges, I believe, lies authentic space for disciplinary reciprocity. As this book suggests, literary studies can offer cognitive science a crucial history; as our fMRI experiment demonstrates, humanists can also enter into a productive dialogue with cognitive science—not by rawly importing or applying its insights, but in fact shaping its studies; informing its methods; and producing a more reciprocal conversation about the history of science, reading, and mind.

Introduction • The Literary History of Distraction

1. Gleick, *Faster*, 5.

2. See Pinch, "Lost in a Book," and Cockayne, *Hubbub*, 1–17.

3. Gay, *Trivia*, 20.

4. Warner, *Licensing Entertainment*, xi.

5. Griffiths, "Advertisement." As Antonia Forster notes, "this 'Advertisement,' is bound following the table of contents at the beginning of volume 1 of the *Monthly Review* in the Bodleian Library's copy (Griffiths' own annotated set) but is bound at the end of the first number, i.e., between pages 80 and 81, in the British Library's copy." Antonia Forster, *Index to Book Reviews*, 15.

6. See in particular Raven, Forster, and Bending, "Historical Bibliography of Prose Novels," and Price, *Anthology and Rise of the Novel.*

7. Pope, "Martinus Scriblerus, of the Poem," in *The Poems of Alexander Pope*, 344.

8. Samuel Johnson, *Rambler* no. 16 (12 May 1750), 1:139; Haywood, *The Female Spectator*, 8.

9. Austen, *Pride and Prejudice*, 238.

10. Fried, *Absorption and Theatricality*, 7.

11. Fry, *Journal.*

12. Swift, "Verses on the Death of Dr. Swift," 555.

13. Defoe, *Robinson Crusoe*, 4.

14. Descartes, *Passions of the Soul*, 42.

15. Samuel Johnson, *Dictionary*, s.v. "Attention," "To Bend."

16. Diderot, s.v. "Distraction (*Morale*)," in Diderot and d'Alembert, *Encyclopédie*. This translation as well as all others from *Encyclopédie* are my own, with thanks to Raphael Godefroy, Alessandra Voena, and Katie Grimes.

17. Lodge, *Consciousness and the Novel*, 10.

18. 1 Corinthians 7:35, KJV (1613).

19. Descartes, *Meditations on First Philosophy*, 104, 105.

20. Beattie, *Dissertations Moral and Critical*, 21, 162.

21. Locke, *Essay Concerning Human Understanding*, 228.

22. Hume, *Treatise on Human Nature*, 252, 92.

23. Diderot, *Rameau's Nephew*, 33 (Diderot, *Le Neveu de Rameau*, 31), as cited in Ross Chambers, *Loiterature*, 5.

24. Leibniz, *New Essays on Human Understanding*, 113.

25. Thus Friedrich Schlegel: "Digression has something like the form of bliss. Repetition of

the theme is the very opposite of that." (Die Parekbasis hat gleichsam die Form einer Wollust. Das Wiederholen des Themas ist das entgegengesetzte dazu.) Schlegel, *Literary Notebooks*, as cited in Ross Chambers, *Loiterature*.

26. Dames, *Physiology of the Novel*, 73, 188, 37.

27. For James, attention is by definition singular: the mind seizes on "one train of thought" out of many, rejecting the rest as extraneous, "withdraw[ing] from some things in order to deal effectively with others." James, *Principles of Psychology*, 403–4.

28. Richet, *Dictionnaire de physiologie*, 833.

29. Binet, *Mind and Brain*, 129.

30. Janet, "L'attention," 836, as cited in Crary, *Suspensions of Perception*, 39.

31. For more on the "spotlight theory," see Pashler, *Psychology of Attention*; Ward, *Attention*; and Driver, "A Selective Review of Selective Attention Research."

32. Motter, "Neurophysiology of Visual Attention," 58.

33. Schwartze et al., "Temporal Regularity Effects," 147.

34. Thomas Brown, *ADHD Comorbidities*, 4; and Thomas Brown, *Attention Deficit Disorder*, 15.

35. Even supporters of the spotlight theory of attention, such as Motter, who use single-neuron investigations of our visual "attention processes" emphasize that "information processing does not progress through a singular hierarchically staged system [but] spreads in parallel through a divergent structure with numerous opportunities for feedback." Motter, "Neurophysiology of Visual Attention," 65.

36. Michael Posner, *Cognitive Neuroscience of Attention*, 201.

37. Geertz, *Interpretation of Cultures*, 451.

38. Bonde, *Here begynneth a deuout treatyse in Englysshe*, as cited in *OED Online*, s.v. "distraction."

39. Ngai, *Our Aesthetic Categories*, 9.

40. La Bruyère, *"Characters."*

41. Ibid., 274.

42. North, *The Problem of Distraction*, 43.

43. Bruyère's inattentive figure reappears in Addison and Steele's *Spectator* no. 77, an essay on the "little Absences and Distractions in Mankind." Describing the scatterbrained Will Honeycomb—a man "very often absent in Conversation" and frequently found in a state of mind the French call "*a distrait*"—its author, Eugene Budgell, openly identifies Bruyère as his source of inspiration and humor. Addison and Steele, *Spectator* no. 77 (29 May 1711): 1:287–88.

44. Crary, *Suspensions of Perception*, 9.

45. Ann Blair, *Too Much to Know*, 1, 3.

46. Price, *Anthology and the Rise of the Novel*, 4.

47. Febvre, "History and Psychology," 6.

48. Spacks, *Boredom*, 28.

49. Crary, *Suspensions of Perception*, 18.

50. Locke, *Essay Concerning Human Understanding*, 227.

51. Kames, *Elements of Criticism*, 456.

52. Reid, *Essays on the Active Powers of Mind*, 79.

53. Koehler, *Poetry of Attention*; Hagner, "Toward a History of Attention."

54. As historian Karl Figlio notes, attention was believed to be necessary for the mind to

move from an impression to "reason and judgment"; associations are built from combined sensations and "[s]ensations were focused upon by attention." Figlio, "Theories of Perception and Physiology of Mind," 197.

55. Smollett, *Expedition of Humphry Clinker*, 186.

56. Ibid.

57. In building the Church of St. Mary-le-Strand, for example, one eighteenth-century architect designed the entire bottom floor without windows "to keep out the Noises from the Street." Gibbs, *Book of Architecture*, vi.

58. Swift, "A Description of the Morning," 405.

59. King, *Art of Cookery*, 100.

60. Watts, *Improvement of Mind*, 214.

61. Benjamin, "Art in the Age of Mechanical Reproduction," 239.

62. Smollett, *Expedition of Humphry Clinker*, 186–88.

63. Fried, *Absorption and Theatricality*, 10.

64. Hurdis, *The Village Curate*, 245, 246.

65. Ibid., 245.

66. Ibid., 182, 183.

67. Samuel Johnson, *Dictionary*, s.v. "Attend."

68. Byron and Moore, *Letters, Journals, and Other Prose*, 37.

69. Bamford, *Early Days*, 192–94.

70. Long, *History of Jamaica*, 411. See also Boulukos, *The Grateful Slave*.

71. Linnaeus's racist association of Native Americans with obstinacy suggests an inflexible attention, while his link of Asians with greed and melancholy implies a racialized focus on finances as well as melancholic self-absorption. Most complicated is his claim about Africans' supposed negligence and caprice, which suggested ungoverned powers of attention, vulnerable to diversion. Marks, *Human Biodiversity*, 50; Ulijaszek and Komolos, *History of Anthropometry*, 185. To view an eighteenth-century edition of Linnaeus's text in the original Latin, see Linnaeus, *Systema Naturae*, 20–22.

72. Grainger, *The Sugar-cane*, 127–28.

73. Wheatley, "On Imagination," 36, 59, 60.

74. Haywood, *Selections from "The Female Spectator,"* ed. Spacks, 130.

75. Francklin, *Sermon preached in the chapel of the Asylum for Female Orphans*, 9.

76. Wollstonecraft, *Vindication of the Rights of Woman*, 90.

77. Fremantle, *Wynne Diaries*, 119.

78. George Eliot to Maria Lewis, 1839, as cited in Bodenheimer, *The Real Life of Mary Ann Evans*, 39.

79. Barthes, "From Work to Text," 1470.

80. Crary, *Suspensions of Perception*, 1.

81. Zunshine, *Why We Read Fiction*, 153.

82. See Vermeule, *Why Do We Care about Literary Characters?*, and Turner, *The Literary Mind*.

83. See Alan Richardson, *The Neural Sublime*; Keen, *Empathy and the Novel*; and Fletcher, *Evolving Hamlet*.

84. The two most important exceptions to this are Nicholas Dames's *The Physiology of the Novel*, which connects Victorian novel theory and nineteenth-century scientific theories of reading, and Alan Richardson's *British Romanticism and the Science of the Mind*, which

skillfully balances Romantic literature, philosophy, and anatomical theories of the mind and brain. Richardson's historical focus, however, meant that his most active contribution to cognitive literary theory had to wait for his second book, *The Neural Sublime*.

85. Black, "Plasticity: Introduction," 107.

86. For more on our ability to multitask and its resistance to training, see Ophira, Nass, and Wagner, "Cognitive Control in Media Multitaskers."

87. Selemon, "A Role for Synaptic Plasticity," 1.

88. As Stanislas Dehaene has shown in *Reading in the Brain*, brain regions associated with reading—in particular, with dyslexia—remain remarkably consistent across languages and cultures. Attention, however, is more flexible. On attention's high cognitive responsiveness to environmental and social stimuli, particularly in early development, see Mark Johnson, "Developing an Attentive Brain," 427–43. See also Dehaene, *Reading in the Brain*, 98, 244–45.

89. Daston and Park, *Wonders and the Order of Nature*, 306.

90. Ibid., 305–6.

91. Work on the neurophysiology of emotion suggests that our brains process words denoting emotion differently according to their positive or negative connotation, or valence. According to a functional magnetic resonance imaging (fMRI) study from 2009, "increasing activity in the left insula accompanied increasing valence (increasingly pleasant stimuli), whereas increasing activity in the right DLPFC and right precuneus accompanied decreasing valence (increasingly aversive stimuli)." Jonathan Posner et al., "The Neurophysiological Bases of Emotion," 888.

92. Daston and Park, *Wonders and the Order of Nature*, 305.

93. Spacks, *Boredom*; Benedict, *Curiosity*; and Daston and Galison, *Objectivity*.

94. As Christian C. Ruff notes, attention can be linked to "virtually all instances of perception. . . . [T]here appear to be different degrees, or even completely different kinds, of attention: it can be directed not only to the things we see, but also to what we hear, or feel on the skin, or to our actions; it can be focused on only one object or can be divided among several of them; it can be guided by our expectations or driven by sudden changes in the environment; and so forth." Ruff, "A Systems-Neuroscience View of Attention," 1.

95. James, *Principles of Psychology*, 404.

96. Parasuraman, *Attentive Brain*, 1.

97. Ibid.

98. La Bruyère, *"Characters,"* 273.

99. Diderot, s.v. "Distraction (*Morale*)," in Diderot and d'Alembert, *Encyclopédie*.

Chapter 1 · Mind Wandering

1. Franklin, *Idea of the English School*, 2.

2. Clarke, *Essay Upon Study*, 97.

3. Addison, "An Account of the Greatest English Poets," 321–22.

4. Cowper, "Retirement."

5. Watts, *Improvement of Mind*, 206.

6. Adorno, "Essay as Form," 157; see also Lukács, "Nature and Form of the Essay."

7. Samuel Johnson, *Dictionary*, s.v. "Essay."

8. Ephraim Chambers, *Cyclopaedia*, s.v. "Essay."

9. Smallwood and Schooler, "The Restless Mind," 946.

10. Historicizing recent neuroscientific research that suggests mind wandering, im-

aginative fictional engagement, and projection (or mental time travel) all engage what's known as the "default networks," or "resting state." Richardson too turns to Johnson, noting his devotion to "regulating one's thoughts" as well as Johnson's belief that "the mind's habitual condition is one of 'incessant cogitation'—the default state." Alan Richardson, "Defaulting to Fiction," 687. For more on recent research in neuroaesthetics suggesting that intense fictional engagement engages default networks traditionally associated with mind wandering, also known as the resting state, see Vessel, Starr, and Rubin, "The Brain on Art."

11. Westminster Assembly, *Assembly's Shorter Catechism Explained*, 311.

12. Allestree, *Whole Duty of Man*, 423.

13. Descartes, *Meditations on First Philosophy*, 21. Descartes splits his mind's pleasures and his goals as a philosopher. Though his mind "enjoys" wandering, Descartes seeks to rein in this otherwise pleasant tendency toward cognitive drift.

14. See Solnit, *Wanderlust*; for a late eighteenth-century reinterpretation of the peripatetic tradition, see Thewall, *The Peripatetic*, 1, 8–9.

15. Rousseau, *Confessions*, 382.

16. Bakhtin, "The Dialogic Imagination," 345.

17. *OED Online*, s.v. "attention span."

18. Montaigne, *The Essayes*, 432.

19. Samuel Johnson, *The Lives of the English Poets*, 365.

20. Gigante, *Great Age of the English Essay*, xv.

21. Samuel Johnson, *Rambler* no. 134 (29 June 1751), 4:300.

22. Samuel Johnson, *Dictionary*, s.v. "Ramble," "Rove," "Wander," "Stray," "Err," "Errour"; italics added.

23. Samuel Johnson, *Idler* no. 1 (15 April 1758), 1:2.

24. Ibid., 1:4.

25. Samuel Johnson, *Dictionary*, s.v. "Idly."

26. John Bunyan's *Pilgrim's Progress* (1678) exemplifies this Christian model of attention as slippery slope, where (literally) straying from the path of righteousness leads to sin.

27. Samuel Johnson, *Rambler* no. 25 (12 June 1750), 1:216. For more on how Johnson's religion shaped his essays, see Clark, *Samuel Johnson*, 125; Chapin, *Religious Thought of Samuel Johnson*; and Pierce, *Religious Life of Samuel Johnson*.

28. Bate, *Samuel Johnson*, 290.

29. Montagu, *Letters*, 292.

30. Walpole, "Countess of Ossory," 333.

31. Addison and Steele, *Spectator* no. 3 (3 March 1711), 1:16.

32. Blackmore, *The Lay-Monastery*, 126; emphasis added.

33. Addison and Steele, *Spectator* no. 58 (7 May 1711), 1:217.

34. Samuel Johnson, *Rambler* no. 16 (12 May 1750), 1:139.

35. Samuel Richardson to Edward Cave, 9 August 1750, in *Selected Letters of Samuel Richardson*, 165.

36. Samuel Johnson, *Rambler* no. 191 (14 January 1752), 6:144.

37. Ibid., 6:145–46.

38. See Engelsing, *Der Bürger als Leser*, and Raven, *Business of Books*.

39. Hugh Blair, *Lectures on Rhetoric*, 3:79; see also Brightland, *Grammar of the English Tongue*, 262.

40. Opinions varied regarding the best practices for holding readers' attention. Eighteenth-century poet Richard Polwhele declared that "apostrophes suspend / Attention by the well-tim'd pause," while John Byrom, a religious versifier, insisted that "flowing Numbers might th' Attention gain." Eighteenth-century essayists and rhetoricians, however, urged that it was simply best to keep it *short*. Polwhele, *English Orator*, 32; Byrom, *Miscellaneous Poems*, 114.

41. Samuel Johnson, *Rambler* no. 1 (20 March 1750), 1:7; my emphasis.

42. Samuel Johnson's *Idler* was shorter than his *Rambler*, narrowing to nine hundred words in the final twenty numbers. Yet even the shortest essays by Johnson still outdid an average *Tatler* or *Spectator*. See Wimsatt, *Prose Style of Samuel Johnson*, 63.

43. Barclay, *Treatise on Education*, 34.

44. Hugh Blair, *Lectures on Rhetoric*, 2:377.

45. "Advertisement," iv.

46. Hugh Blair, *Lectures on Rhetoric*, 1:226.

47. Ibid.

48. Sulzer, *Allgemeine Theorie*, s.v. "Hauptsatz," as cited in Riley, *Musical Listening in the German Enlightenment*, 8.

49. Carver, *Periodical Essays*, xxx.

50. Samuel Johnson, *Rambler* no. 146 (10 August 1751), 5:86.

51. Samuel Johnson, *Rambler* no. 42 (11 August 1750), 2:60.

52. Samuel Johnson, *Rambler* no. 23 (5 June 1750), 1:204; Johnson, *Rambler* no. 10 (21 April 1750), 1:78. Johnson here rewrites complaints about his lack of wandering as a sign of light-minded readers, addicted to the century's (and the genre's) flirtation with distraction.

53. Garrett Stewart, *Dear Reader*, 7.

54. Hugh Blair, *Lectures on Rhetoric*, 2:304.

55. Samuel Johnson, *Idler* no. 50 (31 March 1759), 1:280.

56. Samuel Johnson, *Rambler* no. 4 (31 March 1750), 1:27, 30–31.

57. Boulenger, Hauk, and Pulvermuller, "Grasping Ideas with the Motor System"; Speer et al., "Reading Stories Activates Neural Representations of Visual and Motor Experiences."

58. Lasana Harris, "Social Neuroscience Evidence for Dehumanized Perception," 196, 205.

59. Adams, *Sermons and Tracts upon Religious Subjects*, 344.

60. Samuel Johnson, *Idler* no. 1 (15 April 1758), 1:2–3.

61. Samuel Johnson, *Idler* no. 30 (11 November 1758), 1:167.

62. Dames, *Physiology of Reading*, 77; Crary, *Suspensions of Perception*, 46–7.

63. Johnson, *Rambler* no. 89 (22 January 1751), 3:89.

64. Johnson expended immense personal effort attempting to control cognitive drift. His tools for cultivating focus—strict rules for reading, thirty-mile walks to Lichfield and nightlong London rambles, as well as the consumption of extraordinary amounts of caffeine ("five and twenty cups of tea" on a coach ride to Devon)—rarely worked. Despite many tactics for reanimating his mind, Johnson often found himself lost in melancholy, a lethargy so deep it left him in an "appalling" mental fog in which "feelings of intense anxiety alternated with . . . a lassitude so complete that, as he later confided to

Dr. John Paradise, he could stare at the town clock without being able to tell the hour." See Bate, *Samuel Johnson*, 115–16.

65. Carr, *Sermons*, 29.

66. Samuel Johnson, *Rambler* no. 8 (14 April 1750), 1:69, 66.

67. Samuel Johnson, *Rambler* no. 25 (12 June 1750), 1:216–17; my emphasis.

68. Samuel Johnson, *Dictionary*, s.v. "Attend."

69. Addie Johnson and Robert Proctor, *Attention*, 12.

70. Locke, *Essay Concerning Human Understanding*, 227–28.

71. Hume, "Of the Standard of Taste," 139.

72. Johnson, *Rambler* no. 7 (10 April 1750), 1:60.

73. Meier, *Anfangsfünd aller schönen Wissenschaften*, 283, as cited in Riley, *Musical Listening*, 15.

74. Riley, *Musical Listening*, 16.

75. Samuel Johnson, *Rambler* no. 7 (10 April 1750), 1:55.

76. Ibid., 1:59.

77. Smallwood and Schooler, "The Restless Mind," 947.

78. Reichle, Reineberg, and Schooler, "Eye Movements during Mindless Reading," 1302.

79. McVay and Kane, "Why Does Working Memory Capacity Predict Variation?," 305.

80. Samuel Johnson, *Rambler* no. 17 (15 May 1750), 1:145.

81. Ibid., 1:146.

82. Boswell, *Life of Samuel Johnson, LL.D.*, 1:29.

83. Samuel Johnson, *Idler* no. 74 (15 September 1759): 2:123.

84. Graves, *Spiritual Quixote*, x.

85. Slack, preface to *Pleasing Instructor*.

86. Marsh, *The John Marsh Journals*, 536.

87. Samuel Johnson, *Rambler*, "Mottos and Quotations in the First Volume Translated," 6:294.

88. Samuel Johnson, *Rambler* no. 19 (22 May 1750), 1:163. All subsequent page numbers for this *Rambler* are cited in the text.

89. Puckett, *Bad Form*, 15.

90. Ross Chambers, *Loiterature*, 12–13.

91. Townsend, *Journey Through Spain*, 131–32.

92. Edgeworth and Edgeworth, *Practical Education*, 44.

93. Ward, *Attention*, 20.

94. Hughes and Lund, *Victorian Serial*, as cited in Dames, *Physiology of the Novel*, 81.

95. Samuel Johnson, *Rambler* no. 42 (11 August 1750), 2:60, 67.

96. Ibid., 2:65.

97. Ibid., 2:66–67.

98. Samuel Johnson, *Rambler* no. 7 (10 April 1750), 1:59.

99. Locke, *Essay Concerning Human Understanding*, 129.

100. His *Idler* no. 3 comments on his readers' dependence on the arrival of his essays to provide an external stimulus for thought: "awake in the morning," their minds remain "gaping for . . . intellectual food" remaining "vacant of thought" until accordingly spoon-fed by the essayist. Samuel Johnson, *Idler* no. 3 (29 April 1758), 1:15.

101. Samuel Johnson, *Idler* no. 21 (2 September 1758), 1:115.

102. Ibid.

103. Shaftesbury, *Second Characters*, 174.

104. Samuel Johnson, *Rambler* no. 191 (14 January 1752), 6:147, 151.

105. Ibid., 6:151.

106. Ibid., 6:152.

107. Garrett Stewart, *Dear Reader*, 20–21.

108. Ibid., 15–17.

109. While early eighteenth-century novels, such as *The Adventures of Robinson Crusoe*, saw a lengthy title summary as an ideal advertisement for the bookseller's window, by the time of Maria Edgeworth's *Belinda* (1801), titles clearly had become condensed. While Franco Moretti suggests in "Style, Inc." that this compression of British novel titles was tied to marketing space (the decreasing room available in a title catalog as novel publishing grew), I argue for the importance of a second increasingly limited commodity: that of cognitive space.

110. Meier, *Anfangsfünd aller schönen Wissenschaften*, 290, as cited in Riley, *Musical Listening*, 16–17.

111. Samuel Johnson, *Idler* no. 44 (17 February 1759), 1:247.

112. Samuel Johnson, *Idler* no. 36 (23 December 1758), 1:202.

113. Samuel Johnson, *Dictionary*, s.v. "Economy."

114. Samuel Johnson, *Idler* no. 36 (23 December 1758), 1:201.

115. The pinnacle of Barthes's *scriptable*, or "writerly" texts, Johnson's epistles from distracted characters present readers with irony-laced meanings that demand active interpretation. Because they arrive as letters to the editor and because essayists did, in fact, request them from audiences (commingling real and fabricated letters in their publications), these tales participated in a larger blurring of boundaries between writer and reader that Flint describes as "obsessed with the indeterminacy of writer and reader as well as with the equally blurred lines between the bookseller and writer." Flint, *Appearance of Print*, 75.

116. Samuel Johnson, *Idler* no. 36 (23 December 1758), 1:201.

117. Under "to read" Johnson cites Isaac Watts: "If we have not leisure to read over the book itself regularly, then by the titles of chapters we may be directed to peruse several sections." Samuel Johnson, *Dictionary*, s.v. "to read."

118. Boswell, *Life of Samuel Johnson, LL.D.*, 1:400.

119. Samuel Johnson, *Idler* no. 36 (23 December 1758), 1:205.

120. Ibid., 1:203.

121. Samuel Johnson, *Rambler* no. 94 (2 February 1760), 2:235.

122. Boswell, *Life of Samuel Johnson, LL.D.*, 1:31.

123. Milton, *Paradise Lost*, 332–33.

124. James Foster, *Principal Branches of Natural Religion and Social Virtue*, 1:385.

125. This pattern held across Johnson's essays: Wimsatt reports for Johnson's "early Ramblers a high average of 51.4 words per indicated (punctuated) sentence," with an average of 4.08 clauses per sentence. "If we compare Johnson's sentences with those of other English prose masters," Wimsatt admits, "we find him heavy on the scale of length and complexity." Wimsatt, *Prose Style of Samuel Johnson*, 63.

126. Keller, Carpenter, and Just, "The Neural Bases of Sentence Comprehension," 227.

127. "Analyses of word-reading times showed that difficult text was read slower than easy text." Inhoff and Fleming, "Probe-Detection Times," 339.

128. Frazier and Rayner, "Making and Correcting Errors"; Fedorenko, Gibson, and Rohde, "The Nature of Working Memory Capacity"; Gibson et al., "Reading Relative Clauses in English."

129. Samuel Johnson, *Idler* no. 36 (23 December 1758), 1:202; my emphasis.

130. Boswell, *Life of Samuel Johnson, LL.D.*, 1:117.

131. Samuel Johnson, *Rambler* no. 8 (14 April 1750), 1:61–62.

132. Ibid., 1:62.

133. James, *Principles of Psychology*, 405.

134. Herbert, "The Temple," as cited in *OED Online*, s.v. "span."

135. Young, *Odes to King*, as cited in *OED Online*, s.v. "span."

136. MacDonald, *Please Write for Details*, 8, as cited in *OED Online*, s.v. "attention span."

137. *OED Online*, s.v. "distract."

138. Urgo, *In the Age of Distraction*, 8.

139. Bakhtin, "The Dialogic Imagination," 345.

140. Dukette and Cornish, *The Essential 20*, 72–73; H. A. Ruff and K. R. Lawson, "Development of Sustained, Focused Attention," 85–93.

141. Ward, *Attention*, 106.

Chapter 2 · Lapses of Concentration

1. Great Britain, *Rules & Regulations Cavalry*, as cited in *OED Online*, s.v. "attention."

2. Great Britain, Army, Infantry, *Rules and Regulations for the Formations*, ix, 36; emphasis added.

3. Selden and Bacon, *Laws and Government of England*, 202, as cited in *OED Online*, s.v. "guard."

4. Frey, *British Soldier in America*, 87; and Frey, "Courts and Cats," 5.

5. Bland, *Treatise of military discipline*, 121–22.

6. Savile, *The Lady's New-years Gift*, 95–96.

7. A Gentleman of Cambridge, *The lady's preceptor*, 12.

8. Haywood, *The History of Miss Betsy Thoughtless*, 156. All quotations from *Betsy Thoughtless* are hereafter cited in the text; all parenthetical citations in this chapter refer to Haywood's novel.

9. Endsley, "Toward a Theory of Situation Awareness," 36.

10. Cognitive scientists Johnson and Proctor describe situational awareness as the aspect of attention that allows us to maintain "an accurate dynamic picture of the situation," to "keep track of large amounts of changing information, predict changes in the environment around us, and choose an appropriate course of action." Addie Johnson and Robert Proctor, *Attention*, 280.

11. Ibid., 282.

12. Margolin, "Cognitive Science," 288–89, 291.

13. Leibniz, *New Essays on Human Understanding*, 113, 115.

14. Samuel Johnson, *Dictionary*, s.v. "Vigilance," "Circumspect."

15. Sterling, "To Mrs. Eliza Haywood," a1.

16. Haywood, *Fantomina*, 43.

17. Plumb, "The New World of Children," 307.

18. Swift, "A Description of the Morning."

19. Edgeworth and Edgeworth, *Practical Education*, 78–79.

20. *OED Online*, s.v. "aptonym."

21. Pope, "Epistle II: To a Lady on the Characters of Women," in *The Poems of Alexander Pope*, 560.

22. Locke, *Essay Concerning Human Understanding*, 106–7.

23. Steele, *Tatler*, vol. 3, no. 151 (1710): 179. For more on the history of vacancy, see Sears, "Vacancy."

24. Cleland, *Memoirs of a Woman of Pleasure*, 8.

25. Rowson, *Reuben and Rachel*, 227.

26. Cockayne, *Hubbub*, 16.

27. Tryon, *Tryon's Letters*, 1–3, 6, as cited in Cockayne, *Hubbub*, 17.

28. Tryon, *Some Memoirs of the Life of Mr. Thomas Tryon*, 112, as cited in Cockayne, *Hubbub*, 17.

29. Cockayne, *Hubbub*, 16.

30. Tryon, *Tryon's Letters*, 6–7, as cited in Cockayne, *Hubbub*, 17.

31. Diderot, s.v. "Amusement," in Diderot and d'Alembert, *Encyclopédie*.

32. Astell, *Serious Proposal to the Ladies*, 68.

33. Savile, *The Lady's New-years Gift*, 156–57.

34. Pope, "Epistle II: To a Lady on the Characters of Women," in *Poems of Alexander Pope*, 569.

35. Ibid., 560.

36. Daston, "The Naturalized Female Intellect," 218.

37. Quinlan, "Writing the Natural History of Women," 22–23.

38. Pierre Canibus, as quoted in Alan Richardson, *British Romanticism and Science of Mind*, 109.

39. Daston, "Naturalized Female Intellect," 218.

40. Watts, *Improvement of Mind*, 255–56. Phillip Doddridge reinforces this view in *A Course of Lectures on the Principal Subjects in Pneumatology, Ethics, and Divinity*, where he declares that "Children soon forget, as they soon learn: old people learn with difficulty, and remember best what they learnt when young . . . because the brain growing by degrees more dry retains old characters, but does not easily admit new." Doddridge, *Pneumatology, Ethics, and Divinity*, 17.

41. Watts, *Improvement of Mind*, 67.

42. Fordyce, *Sermons to Young Women*, 40.

43. "Before 1660," argues Theresa Braunschneider, "English readers and theatergoers had never heard of a 'coquette'; by the early 1700s they could hardly watch a play, read a poem, or peruse a newspaper without encountering one." Braunschneider, *Our Coquettes*, 1.

44. Ibid., 12.

45. Ibid., 2.

46. Jung, "The New Woman in the Eighteenth-Century Novel," 128.

47. For an insightful reading of Haywood's aesthetic and her romantic novels' intentions, see Lubey, "Eliza Haywood's Amatory Aesthetic."

48. Moir, *Female tuition*, 103.

49. Cleland and Bell, *Dictionary of Love*, s.v. "Caprice."

50. Charles Allen, *The polite lady*, 95–96.

51. Moir, *Female tuition*, 103.

52. Backsheider, "The Story of Eliza Haywood's Novels," 22, 23.

53. Spacks, "Ev'ry Woman Is at Heart a Rake," 33.

54. For more on the feminization of virtue in the eighteenth-century novel, see McKeon's reading of *Pamela* in *Origins of the English Novel.* McKeon, *Origins of the English Novel*, 233–306.

55. Haywood, *The Female Spectator*, 47.

56. Castle, *Masquerade and Civilization*, 26.

57. Addie Johnson and Robert Proctor, *Attention*, 280.

58. Ibid., 282.

59. Starr, "Multisensory Imagery," 288.

60. Descartes, *Rules for the Direction of the Mind*, 33.

61. Watts, *Logick*, 525.

62. Leibniz, *New Essays on Human Understanding*, 113.

63. Addie Johnson and Robert Proctor, *Attention*, 19. See Broadbent, *Perception and Communication.*

64. See Deutsch and Deutsch, "Attention."

65. Dugald Stewart, *Philosophy of the Human Mind*, 2:124.

66. Ibid., 2:123.

67. Ibid., 2:124.

68. Ibid.

69. Deleuze and Guattari, *Thousand Plateaus*, 23.

70. Robbe-Grillet, *For a New Novel*, 138–39.

71. Cohn, *Transparent Minds*, 34, 29.

72. Dennett, *Consciousness Explained*, 45, as cited in Palmer, *Fictional Minds*, 98–99.

73. Locke, *Essay Concerning Human Understanding*, 154.

74. Dugald Stewart, *Philosophy of the Human Mind*, 2:527.

75. Genette, *Narrative Discourse*, 10.

76. Haywood, *The Female Spectator*, 48.

77. Ibid.; emphasis added.

78. Urgo, *In the Age of Distraction*, 8.

79. Puckett, *Bad Form*, 49.

80. Ibid., 49, 50.

81. Vidulich et al., *Situation Awareness*, 11.

82. Addie Johnson and Robert Proctor, *Attention*, 282. See D. G. Jones and M. R. Endsley, "Sources of Situation Awareness Errors in Aviation."

83. Deleuze and Guattari, *Thousand Plateaus*, 26.

84. This risk of slippage is particularly high in cases of "stylistic contagion," places where, as Cohn puts it, "psycho-narration verges on the narrated monologue" or where "a reporting syntax is maintained, but where the [narrative] idiom is strongly affected (or inflected) with the mental idiom of the mind it renders." Cohn, *Transparent Minds*, 33.

85. Butte, *I Know That You Know*, 28.

86. Zunshine, *Why We Read Fiction*, 28.

87. Ibid., 31.

88. Simpson, *Language, Ideology, and Point of View*, 64.

89. Barbara Read and Ian Birchall, *Flowers and Revolution*, 95. Introducing his theory of focalization in *Narrative Discourse Revisited*, Gérard Genette asks "Who sees?" as opposed to "Who speaks?" (64). Even Margolin, who thinks about "cognizers," not focalizers, compares the reduced awareness of distracted characters to "deficient or failing eyesight," suggesting that when "a whole narrative is literally focalized through a half-blind observer, the result is a radical undermining of the traditional reliable eyewitness account." Margolin, "Cognitive Science," 289.

90. Dugald Stewart, *Philosophy of the Human Mind*, 2:527.

91. William Nelles's "Omniscience for Atheists" breaks omniscience down into four categories: (1) *omnipotence*, the ability to know all narrative events; (2) *omnitemporality*, the ability to move through time and forecast events; (3) *omnipresence*, the ability to "go everywhere and see everything"; and (4) *telepathy*, the ability to read and narrate characters' minds, thoughts, and feelings. Semiomniscient characters suggest the need to introduce another classification: *omnifocus*, or *omnifocalization*, the ability to attend to multiple threads of narrative and plot at once in an effort to bring the most relevant parts of the story to readers' attention. Nelles, "Omniscience for Atheists," 69.

92. Genette would call this repetitive focalization, or multifocalization. For more on how minor characters interact within a novel's character system, see Woloch, *The One vs. the Many*.

93. *Monthly Review* 5 (October 1751), 394, as cited in Alison Conway, *Private Interests*, 120.

94. Thompson, "Betsy Thoughtless and the Persistence of Coquettish Volition," 115.

95. Haywood, *The Female Spectator*, 8.

96. Emma Clery, as quoted in Price, *Anthology and the Rise of the Novel*, 96.

97. Montaigne, "On Books," in *The Complete Essays*, 459.

98. Clarke, *Essay Upon Study*, 103–4.

99. Alan Richardson, *Neural Sublime*, 33.

100. Haywood, *Selections from "The Female Spectator,"* ed. Spacks, 130–31.

101. Margolin, "Cognitive Science," 278.

102. For more modern research on the neural networks involved in lapses of attention, see Weissman et al., "The Neural Bases of Momentary Lapses in Attention." For a cognitive psychological approach to the issue, see J. A. Cheyne, J. S. Carrier, and D. Smilek, "Absent-Mindedness."

103. Kip Smith and P. A. Hancock, "Situation Awareness," 137, 142.

104. González, "Neurofeedback." See also Simmon, "Boeing 757 CFIT Accident Becomes Focus of Lessons Learned."

105. Endsley, "Measurement of Situation Awareness," 65.

106. Braunschneider, *Our Coquettes*, 2.

Chapter 3 · Scattered Attention

1. *Memoirs of the Nutrebian court*, 14.

2. Samuel Johnson, *Dictionary*, s.v. "Shatterbrained," "Shatterpated," "Shatter," "Dis-

traction." For more on distraction and the history of madness, see Porter, *Madness*; Ingram, *Patterns of Madness*; and Ingram, *The Madhouse of Language*.

3. The broken brain was a common eighteenth-century metaphor. Foucault offers the example of Nicholas Joubert, whose lawyer certifies him to be "an empty head, a gutted gourd, lacking in common sense; a cane, a broken brain, that has neither spring nor whole wheel in his head." Foucault, *Madness and Civilization*, 32–33.

4. William Cowper to John Johnson, Weston, 31 July 1790, in *Selections from Cowper's Letters*, 118 (my emphasis).

5. By the mid-nineteenth century, "scatter-brained" had taken on an affectionate tone. Thomas Carlyle's *Reminiscences* (1866) describes a lighthearted minister unable to sustain thought as a "cheerful scatter-brained creature." From distraction as madness, we arrive at distraction as cheer and spontaneous disorder. Carlyle, *Reminiscences*, 1:43.

6. Laurence Sterne, *Tristram Shandy*, 2. All quotes from *Tristram Shandy* are hereafter cited in the text; all parenthetical citations in this chapter refer to Sterne's novel.

7. The idea of scattered spirits has an erotic register in *Tristram Shandy*, evoking scattered manhood and sexual impotence. For a reading of Sterne in this light, see Dennis W. Allen, "Sexuality/Textuality in *Tristram Shandy*."

8. Baddeley, *Human Memory*, 46; see also Engle, "Working Memory Capacity," 20.

9. See George A. Miller, "The Magical Number Seven."

10. Kramnick, "Empiricism, Cognitive Science, and the Novel," 1.

11. In 1733, Cheyne writes: the "*Soul*, resides somewhere in the Brain, where all the Nerves, or Instruments of Sensation, terminate, like a *Musician* in a finely fram'd and well-tun'd Organ Case; that these Nerves are like *Keys*, which, being struck on or touch'd, convey the Sound and Harmony." George Cheyne, *English Malady*, 4–5.

12. Jonathan Lamb, "Language and Hartleian Associationism," 299.

13. Richardson, *British Romanticism and Science of the Mind*, 9.

14. Hume, *Treatise on Human Nature*, 440–41.

15. Cicero, *Brutus* and *Orator*, 447.

16. *Grove Dictionary of Music and Musicians*, s.v. "Rhythm."

17. Rousseau, s.v. "Rhythme (*Musique*)," in Diderot and d'Alembert, *Encyclopédie*.

18. Ibid.

19. Mayoux, "Variations on the Time Sense in *Tristram Shandy*," 4.

20. Phelan, "Voice, He Wrote," 2.

21. Pascal, *Pensées* (Paris: Dezobry et E. Magdeleine, 1852), 93, my translation.

22. Since Tristram the hero doubles as Tristram the writer, rendering his distraction in dashes is high literary artifice, producing the illusion of spontaneity (as if dashes flow directly from his pen) and authenticity (as if punctuation could actually record its author's distraction). The novel relies on the joke cognitive-narrative mimesis but when Sterne brags that the novel was sent "into the world, hot as it came from my Brain, without one Correction," however, do not be deceived. Sterne's dashes demonstrate his attention to narrating the online demands of writing. Sterne, "46. To David Garrick from the Author of Tristram Shandy, York, 27 Jan 1760," in *Letters of Laurence Sterne*, 87.

23. Herbert Read, introduction to *Sentimental Journey*, xliii.

24. Jenyns, *Disquisitions on Several Subjects*, 66.

25. Foucault, *Madness and Civilization*, 166.

26. Diderot, s.v. "Distraction (*Morale*)," in Diderot and d'Alembert, *Encyclopédie*.

See Dieckmann, "Diderot's Conception of Genius"; Fellows, "The Theme of Genius in Diderot's Neveu de Rameau"; and Mail, "Le Neveu de Rameau and the Idea of Genius."

27. Diderot, s.v. "Absorber, engloutir," in Diderot and d'Alembert, *Encyclopédie*.

28. Diderot, s.v. "Distraction (*Morale*)," in Diderot and d'Alembert, *Encyclopédie*.

29. Letter from Lady Mary Wortley Montagu to the Lady ——, Pera, 16 March 1717, in *The Letters of Lady Mary Wortley Montagu*, 106.

30. Sterne intended readers to pick up on *Trismegistus*'s reference to Hermes, god of swift-winged thought. According to Martianus Capella, Mercury gave Psyche the gift of cognitive rapidity: "a vehicle with swift wheels in which she could travel at an astonishing speed" until "Memory bound it and weighted it down with golden chains." Capella, "The Betrothal," 126.

31. Cromie, *1811 Dictionary of the Vulgar Tongue*, s.v. "Noddle" and "Noddy."

32. Walter's very insult about Susannah's forgetfulness (a "leaky vessel") raises the likelihood of her scattering. According to Marius D'Assigny, heightened emotion interrupts recall: "if the Spirit be disturb'd by . . . violent Passions," these "Alarms and Troubles of the Soul" not only "blot out the Ideas that are already entertain'd," but spawn a "Croud of thoughts" that "obstruct all the Passages [and hinder] Memory." D'Assigny, *Art of Memory*, 27–28.

33. Condillac, *Oeuvres*, 1:123; my emphasis. English translation from Spitzer, *Metaphor and Musical Thought*, 348.

34. Derek Alsop and Chris Walsh argue that this mirroring is the point of the Madam Reader episode: "We as readers are always, in a sense, improperly 'inattentive,' as we lack the future textual information at any reading moment to know properly what we ought to be attending *to*." Alsop and Walsh, *The Practice of Reading*, 41.

35. In a tradition that stretched back to Aristotle, the animal spirits, or *pneuma psychikon*, were cast as moving along a chain of tubes to transmit a single stream of thoughts. See C. U. M. Smith, "Brain and Mind in the 'Long' Eighteenth Century."

36. Quoted in ibid., 18.

37. Borelli, *De Motu Animalium*, as cited in Glynn, *Anatomy of Thought*, 93.

38. Glynn, *Anatomy of Thought*, 93–94.

39. Letters from Descartes to Mersenne, 11 June 1640 and 6 August 1640, in *The Philosophical Writings of Descartes*, 148, 151. For more on Descartes's "plis de memoire," see Sutton, *Philosophy and Memory Traces*, 60–64.

40. Ephraim Chambers, *Cyclopaedia*, s.v. "Brain."

41. Smollett, *History and Adventures of an Atom*, 1:171–72.

42. Hume, *Treatise on Human Nature*, 39.

43. Elfenbein, "Cognitive Science and History of Reading," 487.

44. Baddeley, *Human Memory*, 67.

45. Ibid., 46.

46. Swets et al., "The Role of Working Memory," 64. See also Abney and Johnson, "Memory Requirements."

47. Frazier and Rayner, "Making and Correcting Errors"; Fedorenko, Gibson, and Rohde, "The Nature of Working Memory"; Edward Gibson et al., "Reading Relative Clauses in English."

48. Bader, "Prosodic Influences on Reading."

49. *Tristram Shandy*'s syntax provides a complex version of George A. Miller and

Noam Chomsky's seminal experiment on working memory and noun clauses. See Chomsky and Miller, "Introduction to the Formal Analysis of Natural Languages."

50. See Lewis, "Interference in Short-Term Memory."

51. Kunastrokius, *Explanatory Remarks upon Tristram Shandy*, 9–10.

52. In his aesthetic treatise, Hogarth declared "two or three lines" were "sufficient to shew the intention of an attitude." Hogarth, *Analysis of Beauty*, 135.

53. Sterne, "50A. To Richard Berenger, London, 8 March 1760," in *Letters of Laurence Sterne*, 99.

54. Sterne's "The Abuses of Conscience" was first delivered in the Cathedral Church of St. Peter's on July 29, 1750. See Sterne, *Sermons of Mr. Yorick* and *Practical Preacher*.

55. Croft, *Whitefoord Papers*, 223–35, as cited in Cross, *Life and Times of Laurence Sterne*, 229.

56. Lukács, *Theory of the Novel*, 58–59.

57. According to Trim, the homily begins "like a sermon" and "goes on . . . like a sermon directly" (84). In the eighteenth century, sermons had a uniform rhetorical rhythm with seven clear parts: "1) exordium, 2) explication, 3) proposition, 4) partition, 5) argumentative point, 6) application, and 7) conclusion." Lessenich, *Elements of Pulpit Oratory*, 41.

58. *A Treatise of Stops, Points, or Pauses*, facsimile edition in *English Linguistics*, 4–5, as cited in Campbell, "Fielding's Style," 417–18.

59. Vives, "On Memory and Recall," 25.

60. Vida, *Vida's Art of Poetry*, 50.

61. Darwin, *Temple of Nature*, 10.

62. See A. R. Conway, N. Cowan, and M. F Bunting, "The Cocktail Party Phenomenon Revisited," 331.

63. Riley, *Musical Listening*, 97.

64. Forkel, "Anküdigung seines akademischen," as cited in Riley, *Musical Listening*, 97.

65. According to Paul Hunter, the Shandean "art of interruption" exemplifies Sterne's interest in "the limits of conventional rhetoric." Hunter, "Response as Reformation," 133.

66. Cicero, *Rhetorical Treatises*.

67. Hugh Blair, *Lectures on Rhetoric*, 2:291.

68. Bogg, *Lower Wharfeland*, 354.

69. Dugald Stewart, *Philosophy of the Human Mind*, 1:240.

70. See M. R. Jones, "Time, Our Lost Dimension," and McAuley et al., "The Time of Our Lives."

71. As John Freeman notes, Sterne's novel layers temporalities and narrative lines to produce complexity that verges "on the turbulent edge of chaos." Freeman, "Delight in the (Dis)order of Things," 154.

72. Klapp et al., "On Marching to Two Different Drummers," 814.

73. Forkel, *Allemeine Geschichte der Musik*, 1:77, as cited in Riley, *Musical Listening*, 17.

74. Koch, *Musikalisches Lexicon*, 1258–59, as cited in Riley, *Musical Listening*, 17–18.

75. *The clockmakers outcry*, 43–44.

76. Rousseau, s.v. "Rhythme (*Musique*)," in Diderot and d'Alembert, *Encyclopédie*. A "reasonably accomplished amateur performer" on the violin and bass viol, Sterne, Ian Campbell Ross notes, was "interested in using his knowledge of music to experiment with . . . prose style." Ross, *Laurence Sterne*, 107.

77. Sisman, "Haydn's Theater Symphonies," 327, 326.

78. Holden, *Essay Towards a Rational System of Music*, 72, 71–72; emphasis added.

79. Hort, *Sermons on Practical Subjects*, 249.

80. Homer Obed Brown, "Tristram to the Hebrews," 731.

81. Buzsáki, *Rhythms of the Brain*, 31. As Buzsáki notes, periodicity (i.e., "a repeating pattern or structure in time or space") crosses fields: "Periodicity is the term of choice in social and earth sciences. Oscillation is the preferred term in physics, and engineers talk about cyclic or period generators" (5).

82. Ehrenzweig, *Hidden Order of Art*, xi.

83. Reid, *Essays on the Active Powers of Man*, 80. On the history of scientific specialization and discourses of intellectual difficulty, see Valenza, *Literature, Language, and the Rise of the Intellectual Disciplines.*

84. For more on the history of genius, see Currie, *Genius*; Murray, *Genius*; and Engell, *Creative Imagination.* On genius in Romantic science, see Schaffer, "Genius in Romantic Natural Philosophy."

85. "A Review of Frenais's Translation," as cited in Howes, *Laurence Sterne*, 396.

86. Samuel Richardson to Bishop Hildesley, 1761, in *Selected Letters of Samuel Richardson*, 341.

87. Sterne, preface to *The Beauties of Sterne*, vi.

88. Cash, *Laurence Sterne*, 140.

89. Coleridge, *Miscellaneous Criticism*, as quoted in Howes, *Laurence Sterne*, 356.

90. Scott, "Laurence Sterne," as quoted in Howes, *Laurence Sterne*, 374.

91. Chomsky, *Language and Problems of Knowledge*, 159.

92. Darwin, *Zoonomia*, 1:49–50.

93. Darwin, *Temple of Nature*, 34.

94. Lodge, *Consciousness and the Novel*, 62.

95. Parasuraman, *Attentive Brain*, 3; Michael Posner, *Cognitive Neuroscience of Attention*, 157; Thomas Brown, *Attention Deficit Disorder*, 21, 11.

96. Shklovsky, *Theory of Prose*, 147–48.

97. Cowan, "Evolving Conceptions of Memory Storage."

98. Lashley, "The Problem of Serial Order in Behavior," 127.

99. American Psychiatric Association, "Attention-Deficit/Hyperactivity Disorder."

100. Snyder et al., "The Creativity Quotient," 416.

101. See Isen, Daubman, and Nowicki, "Positive Affect Facilitates Creative Problem Solving."

102. Leechman, *Temper, Character, and Duty of a Minister of the Gospel*, 41.

Chapter 4 • Fixated Attention

1. All quotations from Richard Pack's "The Microscope" hereafter cited in the text are taken from *Female Inconstancy Display'd in Three Diverting Histories.* Originally published anonymously as a single broadsheet, the poem was republished numerous times, often under different titles, in miscellaneous collections such as *Female Inconstancy Display'd in Three Diverting Histories* (1732) and *The Muse in Good Humour: or, a Collection of Comic Tales* (1744).

2. The luna moth, discovered in 1700 in North America, had "eye-spots" whose

concentric rings were compared to Saturn, hence its family name, *Saturniidae*. For more, see Powell, "Lepidoptera," 631–63.

3. Godwin, *Caleb Williams*, 132. All subsequent parenthetical citations in this chapter refer to *Caleb Williams*.

4. Davidson, *Now You See It*, 1.

5. Simons and Chabris, "Gorillas in Our Midst."

6. Johann-Heinrich-Samuel Formey, s.v. "Attention," in Diderot and d'Alembert, *Encyclopédie*.

7. While the first compound microscopes (ca. 1631) could analyze the structure of familiar objects, such as a "nettle" or "the wings of a butterfly or bird," by 1667, scientists had developed lenses capable of magnifying "hundreds, rather than tens, of times." Ford, "Enlightening Neuroscience," 29.

8. Diderot, s.v. "Distraction (*Morale*)," in Diderot and d'Alembert, *Encyclopédie*.

9. Brook, *Reasons for the necessity of silent waiting*, 12.

10. Jean Senebier, *L'art d'observer*, 1:15–16, as cited in Daston and Lunbeck, *Histories of Scientific Observation*, 99.

11. Daston and Lunbeck, *Histories of Scientific Observation*, 99.

12. See Adair, *Philosophical and Medical Sketch*.

13. See Horkheimer and Adorno, *Dialetic of Enlightenment*.

14. The microscope exemplified an Enlightenment trend of "experimental practices, institutions, works of art, and . . . optical instruments" shaping cognitive practice. Microscopy trained static physical and mental habits: bending over an object to focus on it, remaining in a fixed position for long periods, excluding other objects from sight. Eliassen and Jacobsen, "Where Were the Media before the Media?," 66.

15. Pope, *An Essay on Man*, in *The Poems of Alexander Pope*, 511.

16. Parker, *Principles of Aesthetics*, 36.

17. Garrett Stewart, "Attention Surfeit Disorder," 61–89.

18. Addie Johnson and Robert Proctor, *Attention*, 66, 68.

19. Ibid., 71.

20. Van Zuylen, *Monomania*, 2–3.

21. Esquirol, "Le grammairien et le causeur," 522, as cited in Van Zuylen, *Monomania*, 3.

22. Locke, *Essay Concerning Human Understanding*, 228.

23. Locke, *Locke's Essays*, 522.

24. Girtin, "Mingling with Matter," 509.

25. Swift's portrayals of Laputan sight also springboard his attack on the Royal Society in the thinly disguised "Academy of Lagado," whose projects (such as plowing a field with pigs, or developing wool-free sheep) he believed had little application to daily life. Robert Hooke's *Micrographia*, with its images of insects magnified through a microscope's lens, was the society's emblem. Reversing the century's positive metaphorics of attention, vision, and magnification, *Gulliver's Travels* draws our focus to the dark side of concentration, translating Hooke's flea into a symbol of uselessly narrowed—even socially deviant—focus.

26. Swift, *Travels*, 140.

27. Clarke, *Essay Upon Study*, 97–99.

28. Kepler, *Astronomiae Pars Optica*, as cited in *OED Online*, s.v. "focus."

29. Newton, *Opticks*, 7.

30. Goldsmith, *Citizen of the world*, 2:28; my emphasis.

31. Swift, *Travels*, 139–40.

32. Ibid., 139.

33. In his *Battle of the Books*, Swift links the eye directly to the brain: "she took the ugliest of her Monsters . . . and flung it invisibly into his Mouth; which flying strait up into his Head, squeezed out his Eye-Balls, gave him a distorted Look, and half overturned his Brain." Swift, *A tale of a tub*, 145.

34. Swift, *Travels*, 140.

35. Ibid., 152.

36. Bender and Marrinan, *Culture of Diagram*, 70.

37. Ingram, *Voices of Madness*, xii.

38. Lennox, *Female Quixote*, 7–8.

39. Charles Allen, *The polite lady*, 95.

40. *OED Online*, s.v. "absorption."

41. Henry More, *Explanation of the grand mystery of godliness*, and Harvey, *The Disease of London*, as cited in *OED Online*, s.v. "absorption."

42. In 1761, Johnson's *The Idler* uses *absorption* to describe not only selective attention but moments when focus produces distraction, moments in which "the absorption of our thoughts in the business of the present day" grows so intense that we are rendered oblivious: "every calamity comes suddenly upon us." Samuel Johnson, *Idler* no. 41 (27 January 1759), 1:230.

43. Lennox, *Female Quixote*, 7, 10. The words "whole" or "wholly" appear 108 times in *The Female Quixote*. If Laputan reverie derives from living on a floating island, Arabella's immersion in fiction is complete because her reading occurred while she was "wholly secluded from the World," with "no . . . Diversion" save the romances on her mother's bookshelves (7).

44. Ibid., 34, 20.

45. Ibid., 25, 373.

46. "Concentration" appears to comic effect in Tobias Smollett's *The Adventures of Peregrine Pickle*, vol. 2 (1751); hoping to seduce his future wife, Smollett's rakish hero Peregrine avoids distractions, gathering his scattered thoughts "to concentrate the whole exertion of his soul" on his plan for seduction (219).

47. Ephraim Chambers, *Cyclopaedia*, s.v. "Concentration."

48. Samuel Johnson, *Dictionary*, s.v. "to Concentrate," "Concentration."

49. Ibid., s.v. "to Concentrate."

50. Ephraim Chambers, *Cyclopaedia*, s.v. "Concentration."

51. James Boswell to William Temple, Rotterdam, 16 August 1763, in *Dutch Journal* (1763–64), in Ingram, *Patterns of Madness*, 124.

52. Butler, "Godwin, Burke, and *Caleb Williams*," 237.

53. In a Godwinian aesthetics of fixation, ideas are described in the discourse of master and servant: characters act "in obedience to" *l'idée fixe*, "the principle which at present governed me with absolute dominion" (116).

54. Fixation is rooted in scientific discourse. In alchemy and chemistry, fixation refers to "the process of reducing a volatile spirit or essence to a permanent bodily form; the conversion (of mercury) into a solid by amalgamation or combination." For Enlight-

enment writers, the loss of flexibility implied by the conversion from gas or liquid into a solid, applied to the mind, suggested a loss of spontaneity. In a 1773 letter, J. Fitzwilliam emphasizes fixation's consequences, describing thoughts "saddened . . . by a long fixation on the doleful object." Both are cited in *OED Online*, s.v. "fixation."

55. Godwin, *Enquiry Concerning Political Justice*, 1:127–28, 279–80.

56. Bentham, *Panopticon*, iii.

57. Great Britain, Parliament, House of Commons, *Report of the Select Committee*, 84.

58. In departing from the Gothic tradition of displacing horror onto continental landscapes or a medieval past, Godwin breaks with the genre's solidification of national identity via xenophobia, or what Cannon Schmitt punningly terms "Alien Nation." Constraining its scope and focus to Great Britain, *Caleb Williams*'s use of concentration as a metaphor for the violations of human rights in rigid political systems strikes home with magnified power. For more on xenophobia in the Gothic, see Schmitt, *Alien Nation*.

59. Charles Brockden Brown, *Edgar Huntly*, 1:191.

60. Ibid., 2:19–20, 23–24.

61. Darwin, *Zoonomia*, 1:199.

62. Ibid.

63. *OED Online*, s.v. "obsession."

64. Ephraim Chambers's *Cyclopaedia* summarizes this conceptual dissonance around focus: "*Attention* of mind is . . . an act of . . . the Will, by which it calls the Understanding from the Consideration of other Objects and directs it to the thing in hand. . . . Nevertheless, our *attention* is not always voluntary: an interesting object seizes, and fixes it beyond the power of control." Ephraim Chambers, *Cyclopaedia*, s.v. "Attention."

65. Castle, *The Female Thermometer*, 165.

66. Van Zuylen, *Monomania*, 3, 6.

67. Dugald Stewart, *Philosophy of the Human Mind*, 1:103.

68. Ibid., 103–4.

69. When Godwin first dives into the debate over serial and parallel processing, he at first seems to argue for the serial, declaring we "cannot attend to several things at once." Later, he adds more nuance, suggesting "the mind *can* apprehend two or more objects at a single effort, but it cannot apprehend them *as* two" (emphasis added); the issue is reconciled in full complexity when he declares: "all those objects which are painted at once upon the retina of the eye, produce a joint and simultaneous impression upon the mind. But they are not immediately conceived by the mind as many." The *Enquiry*'s subtlest argument about multifocal perception emerges in a discussion of sleep, which describes how otherwise ineffectual "calls . . . addressed to us [as well as] other sounds, occasionally [mix] with our dreams, without our being aware" of it, using dreams' incorporation of unheard sensations to argue that "every, the most minute, impression that is made upon our bodies . . . is conveyed to the mind, however faint." Godwin, *Enquiry*, 1:405, 408, 416.

70. Ibid., 1:411.

71. Ibid.

72. Ibid., 412.

73. For more on the relationship between Godwin's philosophy in the *Enquiry* and *Caleb Williams*, see Mulvill, *Upstart Talents*.

74. Godwin, *Enquiry*, 1:415.

75. Ibid., 1:63.

76. Rather than staying self-contained, obsession radiates from character to character. Feelings, Adela Pinch notes, "often seem to have lives of their own in eighteenth-century writing," circulating almost like "autonomous substances" with a freedom that seems "as impersonal, and contagious, as viruses." Pinch, *Strange Fits of Passion*, 1.

77. Adam Smith, *Theory of Moral Sentiments*, 2. In Smith, sympathy requires cognitive labor: the imaginative reconstruction of another's pain. In Godwin, monomania not only distracts the mind from feeling; its narcissism leaves no room for sympathy; the idea of Emily's pain does not even enter Tyrrel's mind.

78. Johnson, *Rambler* no. 199 (11 February 1752), 6:216.

79. *Caleb Williams* repeatedly uses the word "determination" to describe moments of fixed resolution; it appears in the novel more than one hundred times: I "determined to place myself as a watch upon my patron" (107); I was "determined to go on" (317); "I uniformly determined to persist" (318). The term invokes a linear motion from cause to effect, point to point. If in Chambers it describes "the Disposition or Tendency of a Body towards one Way" as well as an "action whereby a cause or agent is limited . . . to act . . . in [a certain] manner," in the Gothic, it evokes the dangerous linearity associated with single-minded attention as well as cognitive rigidity, narcissism, and sympathetic block. Ephraim Chambers, *Cyclopaedia*, s.v. "determination."

80. Glauber, *The works of John Rudolph Glauber*, as cited in *OED Online*, s.v. "concentrate"; my emphasis.

81. Battie, *Treatise on Madness*, 69.

82. Ibid., 68–69.

83. Ibid., 69.

84. Hufeland, *Dr. Gall's New Theory of Physiognomy*, 34–35.

85. Adair, *Philosophical and Medical Sketch*, 61.

86. See Walpole, *The Castle of Otranto* (1764), and Radcliffe's The *Italian, or the Confessional of the Black Penitents* (1797).

87. Walpole, *Castle of Otranto*, iv–v.

88. Shelley, *Frankenstein*, 16.

89. Ibid., 15–16.

90. Ibid., 17.

91. Ibid., 15.

92. Pyrhönen, "Suspense and Surprise," 578.

93. According to Clara Reeve, the Gothic's ability to capture attention required balancing the marvelous ("to excite the attention") with sympathetic engagement ("enough of the pathetic, to engage the heart"). Her main criticism of Walpole's *Otranto* was that it so relied on the marvelous that it produced a focal "redundancy" that "palls" upon the mind: "The machinery . . . destroys the effect it is intended to excite. Had the story been kept within [bounds], the effect had been preserved, without losing the least circumstance that excites or detains the attention." Reeve, preface to *The Old English Baron*, v, vi.

94. Aikin and Aikin, "On the Pleasure Derived from Objects of Terror," 123–25.

95. Burke, *Philosophical Enquiry*, 41–42.

96. Cowper, "Conversation."

97. Supposedly, this focal incentive motivated Godwin's to write his story backward,

returning to the beginning from its end: "I had a great advantage in thus carrying back my invention from the ultimate conclusion to the first commencement of the train of adventures. . . . An entire unity of plot would be the infallible result, and the unity of spirit and interest in a tale truly considered, gives it a powerful hold on the reader, which can scarcely be generated with equal success" (337).

98. Fried, *Absorption and Theatricality*, 92.

99. Fry, *Journal.*

100. Sanders, *Collected Letters of Thomas and Jane Welsh Carlyle*, 1:109.

101. Brooks, *Reading for the Plot*, 4, 37.

102. Pyrhönen, "Suspense and Surprise," 579, 578.

103. As Dehaene notes, even the old neurological model of reading that emphasized the duality of phonological and orthographic processing—or the newer model suggesting reading requires the integration of images in the visual cortex with previously encoded visual images of letters, auditory images of words (Wernicke's area), motor images of words (Broca's area)—is likely oversimplified, to be replaced by a model of reading as occurring in a series of tiered levels of parallel processing. Dehaene, *Reading in the Brain.*

104. Godwin, *Enquiry*, 1:407.

105. Dietrich and Stoll, "Effortless Attention, Hypofrontality, and Perfectionism," 159–60.

106. Anderson, "I Will Unfold a Tale—!," 99, 109.

107. See Michael Posner, "Orienting of Attention."

108. See Rensink, "Attention." As Rensink explains, "observers in IB [inattentional blindness] experiments often report that they can detect something about the nonselected stimuli, even though they cannot always identify it. Importantly, this kind of experience is found only in those experiments involving superimposed or interspersed stimuli; for dichoptically presented stimuli, there is a complete absence of perception of the nonselected event. This suggests that in the superimposed and interspersed conditions diffuse attention is given to nonselected events, with the main event given focused attention" (58).

109. American Psychiatric Association, "Obsessive-Compulsive Disorder."

110. Zizek, *Sublime Object of Ideology*, 56–57.

111. American Psychiatric Association, "Obsessive-Compulsive Disorder."

Chapter 5 · Divided Attention

1. Austen, *Sense and Sensibility*, 208–9.

2. Chesterfield, *Letters Written to his Son*, 1:202–3.

3. Austen, *Sense and Sensibility*, 208–9.

4. Woloch, *The One vs. the Many*, 114. A character system, Woloch explains, means not "the interlocking of a number of distinct fictional individuals within a narrative totality but rather the combination of different character-spaces or of various modes *through which* specific human figures are inflected into the narrative" (32). For more, see his chapter on *Pride and Prejudice*, 43–124.

5. Palmer, *Fictional Minds*, 8.

6. Ward, *Attention*, 17.

7. Ibid., 17–18.

8. Driver and Spence, "Crossmodal Attention," 245.

9. Ward, *Attention*, 19.

10. On dual-task driving performance, see Strayer and Johnston, "Driven to Distraction."

11. A 2014 simulation confirms: "texting leads to statistically significant decrease of the mean speed and increase of the mean reaction time in urban and rural road environment. Simultaneously, it leads to an increased accident probability due to driver distraction and delayed reaction at the moment of the incident." Yannis et al., "Impact of Texting on Young Drivers' Behavior," 25.

12. Austen, *Pride and Prejudice*, 378. All subsequent references will be cited in text.

13. Vermeule, *Why Do We Care about Literary Characters?*, 99.

14. Tanner, *Jane Austen*, 126, as cited in Woloch, *The One vs. the Many*, 43.

15. Woloch, *The One vs. the Many*, 52.

16. E. M. Forster, *Aspects of the Novel*, 108.

17. Lynch, *Economy of Character*, 23, 10.

18. Chesterfield, *Letters Written to his Son*, 1:256.

19. Austen, *Mansfield Park*, 20.

20. Austen, *Northanger Abbey*, 13.

21. Lord Chesterfield defines divided attention as politeness without celebrating distraction; attention has simply become multifocal. "Attend to, and look, at whoever speaks to you," he remonstrates, "and never seem *distrait* or *reveur* . . . nothing is more contemptible." Chesterfield, *Letters Written to his Son*, 4:344. Hostility is reserved for the inattentive man such as Austen's Robert Ferrars: "what is called absence" is really "thoughtlessness and want of attention," Chesterfield declares: "[It] makes a man so like either a fool or a madman, that, for my part, I see no real difference. A fool never has thought; a madman has lost it; and an absent man is, for the time, without it." Ibid., 1:203.

22. Eighteenth-century conversations about characterization, Deidre Lynch shows, tend to quantify the number of lines it took to draw a character, debates marked not by concern about shallowness or flatness but "by alarm over swelling figures." Lynch, *Economy of Character*, 24.

23. Woloch also argues that this comparison of Mr. Darcy and Mr. Hurst just following the "psychological juxtaposition of 'admiration' and 'doubt' [extends] Darcy's depth of character [through] divided consciousness." Woloch, *The One vs. the Many*, 53.

24. Zunshine, "Why Jane Austen Was Different," 276; Butte, *I Know That You Know*, 4.

25. While Mrs. Jenkinson's mind is too static to be anything but a mediocre conversationalist, the heroine can talk about anything, a contrast that illuminates her more sophisticated mind. The conversation between Fitzwilliam and Elizabeth showcases her range and flexibility: they "talked so agreeably of Kent and Hertfordshire, of travelling and staying at home, of new books and music [and] conversed with so much spirit and flow, as to draw the attention of Lady Catherine herself, as well as of Mr. Darcy" (197). Unlike the deadening force of Mrs. Jenkinson, their fluency draws and revivifies the attention of Mr. Darcy and Lady Catherine, formerly occupied with duller discourse.

26. Baxter, *Enquiry into the Nature of the Human Soul*, 192.

27. Dibdin, *Musical Tour of Mr. Dibdin*, 274.

28. Locke, *Essay Concerning Human Understanding*, 396.

29. See Allport, Antonis, and Reynolds, "On the Division of Attention." Regarding improvements in dual and multitask performance with training, see Detweiler and Lundy, "Effects of Single- and Dual-Task Practice."

30. Ward, *Attention*, 19.

31. Ibid. See also Wickens, "Processing Resources in Attention."

32. Jou and Harris, "The Effect of Divided Attention on Speech Production."

33. Wilhelm Heinrich Wackenroder to Ludwig Tieck, 5 May 1792, in *Sämtliche Werke*, 2:29, as cited in Riley, *Musical Listening*, 21.

34. Rudeness from Lady Catherine sets up the comparison of the governess and heroine. Advising Elizabeth to practice, she offers a backhanded compliment: she can "play on the piano forte in Mrs. Jenkinson's room," where nobody will hear: "she would be in nobody's way, you know, in that part of the house" (198).

35. Dames, *Physiology of the Novel*, 88.

36. Distinctively multifocal, the original definition of attention span relied on the early meaning of "span"—the small space between thumb and little finger, later standardized as approximately nine inches. William James used it as late as 1890 to emphasize another set of cognitive limits in multitasking: that the "number of [things] we could attend to at once is small." James, *Principles of Psychology*, as cited in *OED Online*, s.v. "span."

37. D. A. Miller, *Jane Austen*, 37.

38. *Pride and Prejudice*'s opening juxtaposition of Mr. and Mrs. Bennet illuminates the novel's correlation between a character's intricacy and his or her ability to understand the character of others: "Mr. Bennet was so odd a mixture of quick parts, sarcastic humour, reserve, and caprice, that the experience of three and twenty years had been insufficient to make his wife understand his character. *Her* mind was less difficult to develope. . . . The business of her life was to get her daughters married" (45).

39. Austen, "Catharine, or the Bower," 167.

40. Ibid.

41. Malebranche, *Oeuvres complètes*, 11:61, as cited in Riley, *Musical Listening*, 34.

42. Vermeule, *Why Do We Care about Literary Characters?*, 12.

43. Pascal, *Pensées*, trans. A. J. Krailsheimer, 37.

44. Saint-Lambert, "Genius."

45. Puckett, *Bad Form*, 68.

46. Sterne, *Tristram Shandy*, 71–72.

47. Margolin, "Cognitive Science," 272.

48. Austen-Leigh, *Memoir of Jane Austen*, 81–82.

49. Ibid., 81, 82.

50. Austen, *Emma*, 36.

51. Austen, *Northanger Abbey*, 263.

52. Gallagher, "Rise of Fictionality," 346.

53. Cattell, *Intelligence*, 97. See also Cattell, "Theory of Fluid and Crystallized Intelligence."

54. For a reading of Austen's novels and Lockean education theory, see Jocelyn Harris, *Jane Austen's Art of Memory*, 1–33.

55. Saint-Lambert, "Genius."

56. Thomas Brown, *Attention Deficit Disorder*, 33.

57. Fried, *Absorption and Theatricality*, 56.

58. Carruthers, *Book of Memory*, 21.

59. La Bruyère, *"Characters,"* 105.

60. Carruthers, *Book of Memory*, 21–22.

61. This adjustment is known as *conversational entrainment*. For more, see Wilson and Wilson, "An Oscillator Model of the Timing of Turn-Taking."

62. See Cohn, *Transparent Minds*.

63. Damasio, *The Feeling of What Happens*, as cited in Palmer, *Fictional Minds*, 94.

64. The link between character and coinage relies on the practice of imprinting a character on a coin. As Stephen Deng notes, coins were often "personalize[d] by portraying particular rulers," allowing their symbolic presence to "circulate in effigy across the space of their territory." Deng, *Coinage and State Formation*, 52–53.

65. Addison and Steele, *Lucubrations*, 4:263, 262, as cited in Flint, *Appearance of Print*, 178–79.

66. Even in her short literary afterlife, Mary's remains a tableau of limited motion, never getting further than Meryton. As David Brewer notes, Austen was interested in the ongoing stories of many of her minor characters, an interest that included "her characters' entire lives, both on- and off-page." Brewer, *Afterlife of Character*, 195. According to Austen's nephew, his aunt would "tell us many little particulars about the subsequent career of some of her people. . . . Kitty Bennet was satisfactorily married to a clergyman near Pemberley, while Mary obtained nothing higher than one of her uncle Philip's clerks, and was content to be considered a star in the society of Meriton." Austen-Leigh, *Memoir of Jane Austen*, 119.

67. Saint-Lambert, "Genius."

68. Parasuraman, Warm, and See, "Brain Systems of Vigilance," 222; my emphasis, original citations omitted.

69. Diderot, s.v. "Attention [Grammaire]," in Diderot and d'Alembert, *Encyclopédie*.

70. As Juliet McMaster notes, "Lady Catherine de Bourgh would not want us to miss the fine shades in the title 'Lady,'" which, "attached to the first name . . . signifies that the lady in question has the title 'in her own right,'" whereas Darcy's family is "untitled" (113). For more, see McMaster, "Class," 111–26.

71. Pascal, *Pensées*, trans. A. J. Krailsheimer, 38.

72. In Austen, the cognitively rich, not just the landed, demand readers' attention. Heroines of the middling sort, such as Elizabeth Bennet, are given richer capacities, while wealthy characters, such as Lady Catherine, tend to have a paucity. Deprived of narrative and cognitive attention, richer but less sophisticated figures wane into insignificance.

73. Saint-Lambert, "Genius."

74. Engell, *Creative Imagination*, 201.

75. Iser, "Interaction Between Text and Reader," 1677.

76. Dehaene, *Reading in the Brain*, 11.

77. Ibid., 41, 49.

78. Ibid., 51, 50.

79. Iser, "Interaction between Text and Reader," 1678.

80. Smallwood and Andrews-Hanna, "Not All Minds That Wander Are Lost," 441.

81. Baird et al., "Inspired by Distraction," 1117. Despite this, multitasking has always

teetered on the edge of distraction. (A well-known study by Clifford Nass, Anthony Wagner, and Eyal Ophir suggests that people who claim to be best at multitasking are often the worst, both at dividing attention and at sustaining singular focus.) Yet this argument too stands in contrast to recent studies—of video-gamers who demonstrate an expanded scope of spatial attention—implying that such cross-modal training may increase our perceptual capacity to process information at the periphery of sight. See Ophir, Nass, and Wagner, "Cognitive Control in Media Multitaskers," and Green and Bavelier, "Action Video Games Modify Visual Selective Attention."

82. Letter from Jane Austen to Cassandra Austen, Chawton, 4 February 1813, in *Jane Austen's Letters*, 212.

83. Jane Austen to Cassandra Austen, Chawton, 29 January 1813, and Chawton, 4 February 1813, in Austen-Leigh, *Memoir of Jane Austen*, 83, 84.

84. Austen-Leigh, *Memoir of Jane Austen*, 114.

85. Jane Austen to Cassandra Austen, Chawton, 4 February 1813, in Austen-Leigh, *Memoir of Jane Austen*, 84–85.

86. Ibid.,83–84.

87. Ibid., 84.

88. The Countess of Morley to Jane Austen, Saltram, 27 December 1815, in Austen-Leigh, *Memoir of Jane Austen*, 102.

89. Sterne, *Tristram Shandy*, as quoted in discussions of characterization in Lynch, *Economy of Character*, 27.

90. Austen, *Works*, 6:431–35.

91. Ibid.

92. Ibid.

93. Ibid.

94. Bradshaw, "Pride & Prejudice."

95. Natress, "About Austenprose."

96. Palmer, "The Mind beyond the Skin," 322.

97. Austen, *Persuasion*, 173.

98. Lynch, *Economy of Character*, 211.

99. Macready, *Macready's Reminiscences*, 2:39.

100. Bury, *Diary of a Lady-in-Waiting*, 2:261.

101. Austen, *Works*, 6:431–35.

Coda • History of Mind and Literary Neuroscience

1. Austen, *Persuasion*, 5.

2. If the cracked bookbinding of the Baronetage serves as material evidence of Sir Walter's rereading, the proof of Captain Benwick's interest lies in his excessive familiarity with certain mournful lines ("repeat[ing] with such tremulous feeling, the various lines which imaged a broken heart"), reread to the point of memorization. Austen, *Persuasion*, 94. For more on books and readers' marks in them as records of attention—or in the case of distraction, their lack—see Jackson, *Marginalia*, and Sherman, *Used Books*.

3. Austen, *Persuasion*, 93–94.

4. Ibid., 153.

5. Letter from Jane Austen to Cassandra Austen, Chawton, 24 January 1813, in *Jane Austen's Letters*, 198.

6. Letter from Jane Austen to Cassandra Austen, Southampton, 8–9 February 1807, in *Jane Austen's Letters*, 120.

7. DeMaria, *Samuel Johnson and the Life of Reading*, 4.

8. Boswell, *Life of Johnson*, ed. Chapman, 942.

9. Raven, *Business of Books*.

10. Bacon, "Of Studies," 185.

11. Charles Lamb, "Detached Thoughts on Books and Reading," 372.

12. Ibid.

13. Kramp, "The Potency of Jane," 25.

14. Lynch, *Economy of Character*, 220–28. See also Lynch, *Janeites*.

15. Core works in the history of science by scholars such as Lorraine Daston, Barbara Stafford, and Peter Galison seek more to raise awareness about the ideological underpinnings (and historical contingency) of empirical models than to suggest new scientific experiments. See, for instance, Daston and Lunbeck, *Histories of Scientific Observation*; Stafford, *Body Criticism*; and Galison, *How Experiments End*.

16. Watt, *Rise of the Novel*, 198.

17. Watts, *Improvement of Mind*, 68–69.

18. Austen, *Northanger Abbey*, 33.

19. What follows represents early results from an ongoing study. For more on our methodology and preliminary results, see Phillips and Rachman, "Literature, Neuroscience, and Digital Humanities," and Phillips, "Literary Neuroscience and the History of Attention." For ongoing results and future publications, see the website for Digital Humanities and Literary Cognition Lab at Michigan State University, dhlc.cal.msu.edu.

20. See Mazzocco et al., "This Story Is Not for Everyone," 361; and M. Green and J. M. A. Carpenter, "Transporting into Narrative Worlds."

21. Here, close reading is distinguished from pleasure reading; in practice, of course, the two intermix. Guillory argues that both modes "are to be found at the scene of humanist reading, which required the scholar to slow down or speed up at different moments." Guillory, "How Scholars Read," 11.

22. Showalter, *Teaching Literature*, 98.

23. fMRI lets us "characteriz[e] the patterns of brain activation associated with [cognitive] processes" and "link brain activation to mental function" noninvasively with high spatial specificity. Huettel, Song, and McCarthy, *Functional Magnetic Resonance Imaging*, 4.

24. Each block of reading was preceded by instructions, which told subjects when to read for pleasure or close read. Sections of text were kept as close as possible to Austen's paragraphs; since technological constraints (and the variable length *Mansfield Park*'s paragraphs) required breaking them into smaller units; we call these sections "blocks."

25. Following their essay, participants also completed a survey on narrative immersion, Melanie Green's "Transportation Scale" (2000), and answered questions about their fiction-reading practices, the relative ease of close reading and pleasure reading in the scanner, and their previous exposure to (and present taste for) Jane Austen.

26. Since blood always moves through the brain, fMRI images do not depict areas of activation generally, or regions where things "light up." Images of brain activation always show us results in comparison, models that suggest not just *more* neuronal activity, in sum, but significant rises in average blood flow *as compared to* another state.

27. Such individual results must be interpreted cautiously, as readers' experiences can vary on a day-to-day basis. Only group analysis (or repeated testing of an individual subject) can provide the statistical significance and reliability indicating robust cognitive results. For more on interpreting fMRI results, see Lindquist, "The Statistical Analysis of fMRI Data."

28. Most fMRI studies of reading present short—or circumscribed—phrases, often word by word. An experiment by Speer, for instance, presented subjects with a simple story one word at a time. Breaking down sentences clause by clause to identify narrative changes (e.g., movements in space, changing object references, character entrance, new actions or goals, etc.), they were able to map these narrative shifts back to brain regions responsible for processing them in real life. Speer et al., "Reading Stories Activates Neural Representations."

29. Yamamura et al., "Neural Art Appraisal of Painter," 1632.

30. Boulenger, Hauk, and Pulvermuller, "Grasping Ideas with the Motor System."

31. Dehaene, *Reading in the Brain*, 63.

32. Kramnick, "Neuroaesthetics."

33. Gottschall, "Measure for Measure."

34. Those without this historical background might turn to Daston and Galison, *Objectivity*, and Poovey, *History of the Modern Fact.*

35. Latour, "On the Partial Existence of Existing and Nonexisting Objects," 250.

36. Reed, *From Soul to Mind*, 49.

37. Hoffman, *Golden Pot*, 319, as cited in Reed, *From Soul to Mind*, 50.

38. See, for example, Murphy and Kovich, *Historical Introduction to Modern Psychology*, and Whitaker, Smith, and Finger, *Brain, Mind, and Medicine.*

39. William Wordsworth, as quoted in De Quincey, *De Quincey's Works*, 314–15.

40. Richardson points to Shelley as well, who "describes the experience of cognitive dissolution as [part of the process in which] one overpowering vision gives way to the next . . : 'And suddenly my brain became as sand.'" Alan Richardson, *The Neural Sublime*, 31.

41. Letter from John Keats to J. H. Reynolds, Teignmouth, 3 May 1818, in *Selected Letters*, 88–89.

42. Keats, "Epistle to My Brother George," in *Keats: Poems*, 34.

43. Ibid., 37.

44. Leigh Hunt, "My Books," in Gigante, *Great Age of the English Essay*, 279, 277, 280–81.

45. Ibid., 279; emphasis added.

46. Watt, *Rise of the Novel*, 191–92.

47. See, for example, Spacks, *Boredom*; Benedict, *Curiosity*; and McMahon, *Happiness.*

48. Reed, *From Soul to Mind*, 49.

49. Dames, *Physiology of the Novel.*

50. As Ann Blair notes, overload "is often lived by those who experience it as if it were an utterly new phenomenon," yet "the basic methods we deploy" today are "largely similar to those devised centuries ago. . . . We too store, sort, select, and summarize information. . . . [N]ow we rely not only on human memory [and print but] also on computer chips, search functions, data mining, and Wikipedia." Ann M. Blair, *Too Much to Know*, 4.

51. Austen, *Persuasion*, 9.

52. Ramsay and Rockwell, "Developing Things," 79.

53. Kramnick, "Against Literary Darwinism," 347.

54. Savannah Smith's honor thesis, "Literature and Education: Jane Austen and the Enlightenment History of Memory" appeared in April 2015. Austin Gorsuch's senior thesis, "Artificial Memory: Eighteenth-Century Literature and Theories of Extended Mind," appeared in 2013.

55. Lead graduate students at the DHLC demonstrate similar breadth. Erin Beard's dissertation project, "Empathy and Philanthropy: The Ethics of Realism in Nineteenth-Century Literature," is in progress in the Department of English at Michigan State; Nathan Leaman is working on research connecting eighteenth- and nineteenth-century narrative theory, history of mind, and digital humanities; Laura McGrath is completing a dissertation on modernist aesthetics and the history of ideas about novelty and genius. Katie Grimes, lead undergraduate researcher in history of the mind in the DHLC, is simultaneously conducting research on the history of distraction; leading *Exceptions*, an art and literary journal for students with visual disabilities; and working with Alexandra Hidalgo on a feminist documentary about immigrant women as well as on an online forum for women filmmakers.

56. Galison, *Image and Logic*, 46, 48.

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